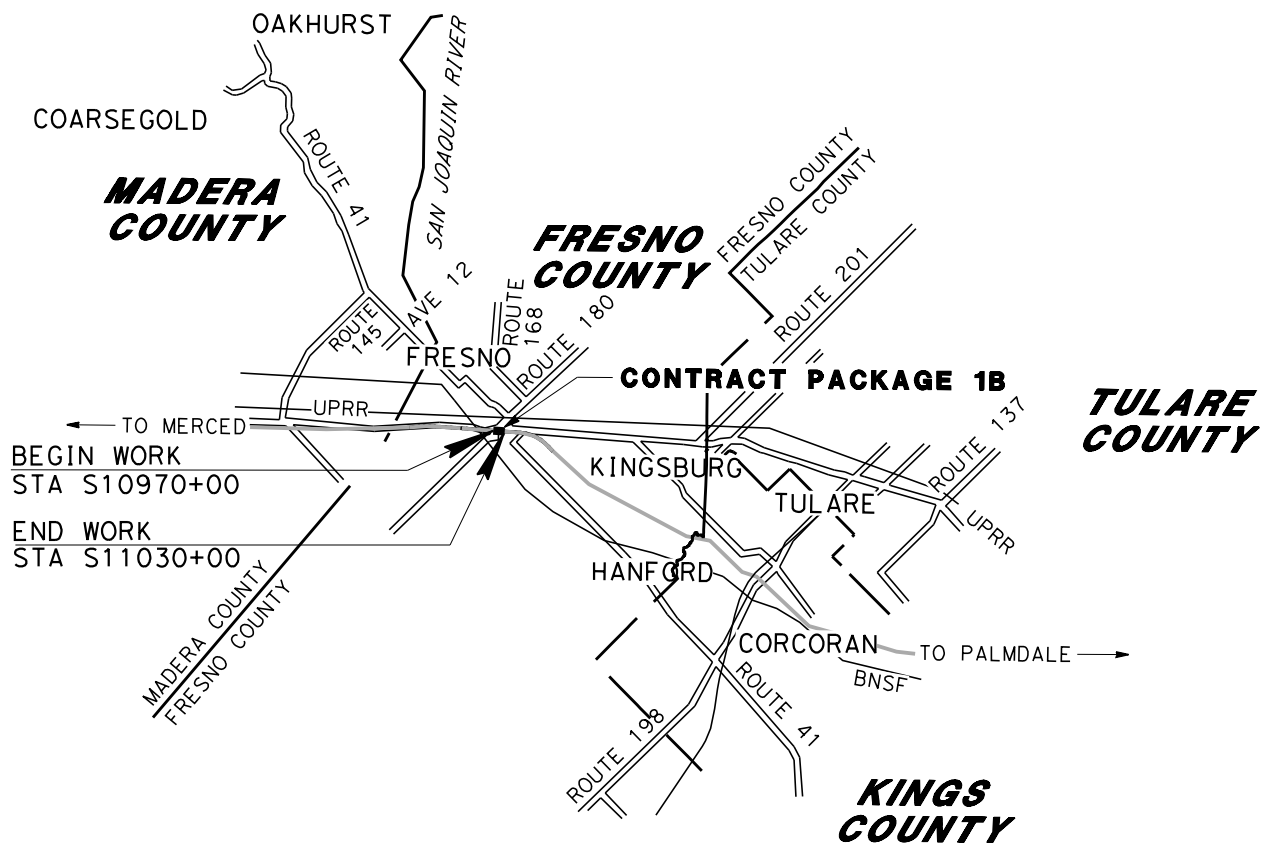
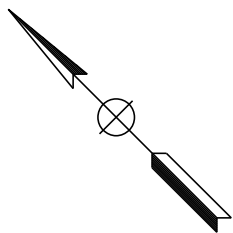
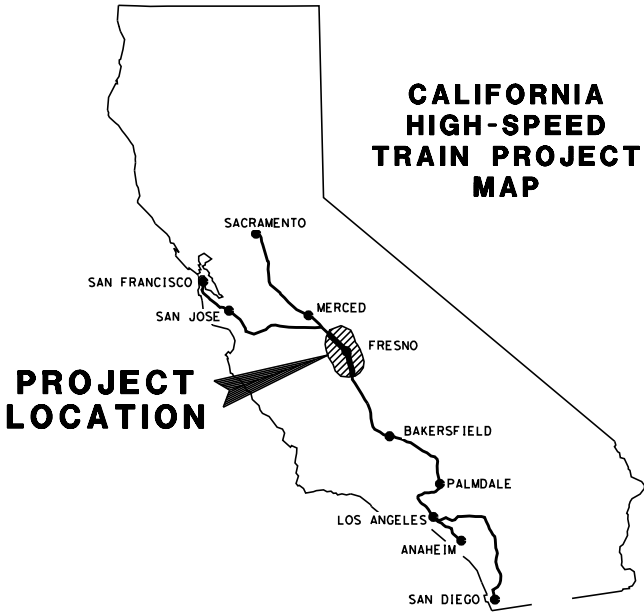


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**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**PROPOSED PRELIMINARY DESIGN  
CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
CONTRACT PACKAGE 1B**



**REV B  
ADDENDUM 3 - RFP HSR 11-16  
JUNE 2012**

**PROJECT LOCATION MAP**

	CONTRACT No.

12/8/2011 4:03:04 PM or+52801 CAHSR-r1.tbl CHSR\_PDF\_half\_black.pltG:\\_Sacramento\URS\235413 CA HSR Fresno Palmdale\16.0 Drawings\SI HSR06-0003\Sheet Files\Package#1\General\SI-CV-B-0010.dgn

VOLUME 1 - GENERAL & TRACK ALIGNMENT

DRAWING No.	DRAWING DESCRIPTION
GE-D0001	PACKAGE 1B - TITLE SHEET
GE-A0010	PACKAGE 1B - GENERAL - INDEX OF DRAWINGS
VS-C0005	PACKAGE 1B - GENERAL - SURVEY CONTROL DATA - SHEET 1 OF 1
TT-B0003	PACKAGE 1B - TRACK GUIDEWAY - KEY MAP
TT-D3009	PACKAGE 1B - TRACK GUIDEWAY - TYPICAL SECTIONS
TT-D3010	PACKAGE 1B - TRACK GUIDEWAY - TYPICAL SECTIONS
TT-D3011	PACKAGE 1B - TRACK GUIDEWAY - TYPICAL SECTIONS
TT-D1015	PACKAGE 1B - TRACK GUIDEWAY - PLAN AND PROFILE - STA. 10946+00 TO STA. 10974+00
TT-D1016	PACKAGE 1B - TRACK GUIDEWAY - PLAN AND PROFILE - STA. 10974+00 TO STA. 11002+00
TT-D1017	PACKAGE 1B - TRACK GUIDEWAY - PLAN AND PROFILE - STA. 11002+00 TO STA. 11030+00

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY R. DEASON
DRAWN BY P. BARBER
CHECKED BY A. BRUNDAGE
IN CHARGE Q. EARLE
DATE 12/08/11

PROPOSED  
PRELIMINARY  
DESIGN

NOT FOR  
CONSTRUCTION

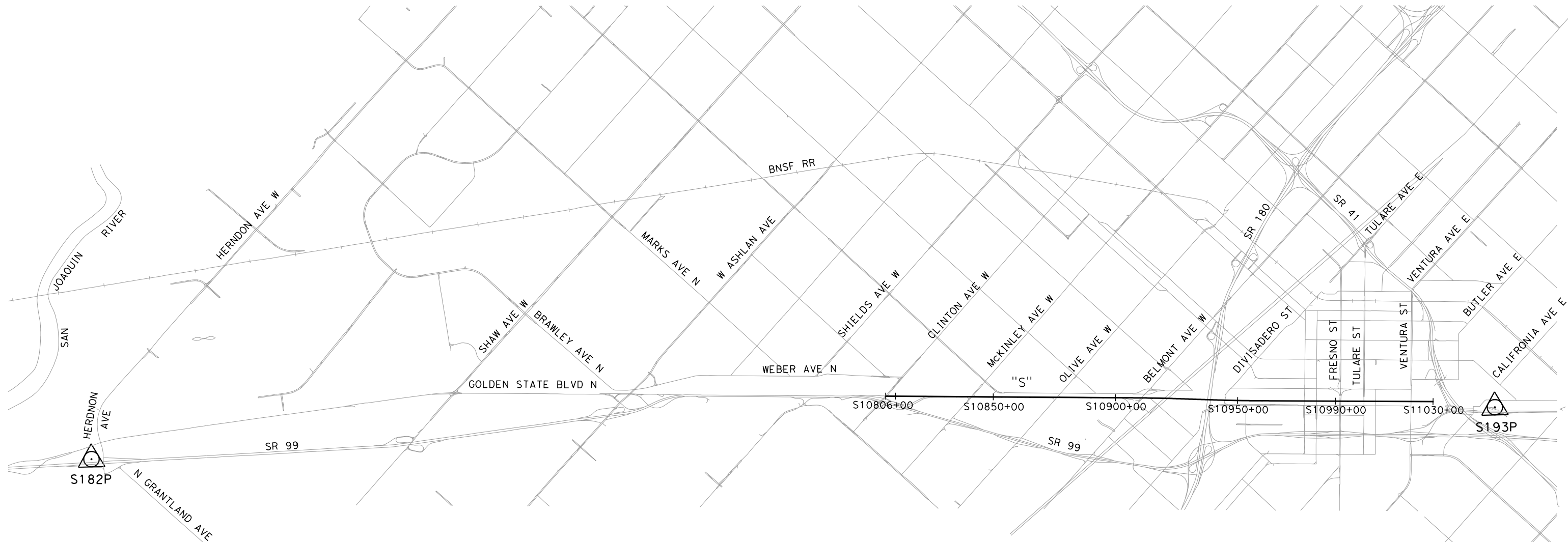


CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
GENERAL  
INDEX OF DRAWINGS

CONTRACT NO.
DRAWING NO. GE-A0010
SCALE NO SCALE
SHEET NO.

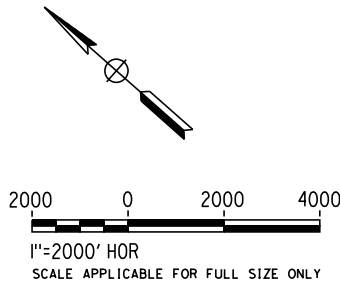


carlton\_allen 12/7/2011 2:47:12 PM CAHSR-r1.tbl CHSR\_PDF\_half\_black.plt P:\27560808\03-RPLANS\MASTERS\TOPOS\Control\Major\_Road\X-FB-XB-Z4-PKGE1B\_01.dgn



DESIGNATION	DESCRIPTION	N	E	ELEV	FACTOR	LOCATION
S193P	FOUND STANDARD CHSRA 2-1/2" BRONZE DISK IN 1" IRON PIPE IN 8" CONCRETE PIER STAMPED "S193P LS4430 2010"	ZONE 4		286.04	0.99993347	IN THE CITY OF FRESNO, COUNTY OF FRESNO, 450 FEET SOUTHERLY ALONG CHERRY AVENUE FROM THE INTERSECTION OF CALIFORNIA AVENUE, 7.8 FEET WESTERLY OF THE WEST CURB FACE OF CHERRY AVENUE, 11.8 FEET NORTHEASTERLY OF THE NORTHEASTERLY CURB FACE OF G STREET.
		2146202.84	6332518.62			
S182P	FOUND STANDARD CHSRA 2-1/2" BRONZE DISK IN 1" IRON PIPE IN 8" CONCRETE PIER STAMPED "S182P LS4430 2010"	ZONE 3		300.64	ZONE 3	IN THE COUNTY OF FRESNO, CITY OF FRESNO, FROM THE INTERSECTION OF GOLDEN STATE BOULEVARD AND KATHRYN DRIVE, SOUTHEASTERLY 510 FEET ALONG KATHRYN DRIVE TO THE MONUMENT, 1.0 FEET BEHIND THE BACK OF WALK ON THE SOUTHWESTERLY SIDE OF KATHRYN DRIVE.
		1762400.74	6731915.56		1.00004703	
		ZONE 4			ZONE 4	
		2187855.88	6292923.69		0.99993801	

DATA SHOWN HEREON IS BASED ON SURVEY CONTROL MONUMENT DATA SHEETS AND MAP ON FILE IN THE OFFICE OF THE CHSRA  
HORIZONTAL DATUM: NAD83 (NSRS2007) EPOCH: 2007.00 CALIFORNIA COORDINATE SYSTEM (CCS83), US SURVEY FEET  
VERTICAL DATUM: NAVD88, US SURVEY FEET



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
S. CHRISTENSEN  
DRAWN BY  
S. AVILES  
CHECKED BY  
J. LABANOWSKI  
IN CHARGE  
G. HORTON  
DATE  
12/08/11

**PROPOSED  
PRELIMINARY  
DESIGN**  
  
**NOT FOR  
CONSTRUCTION**



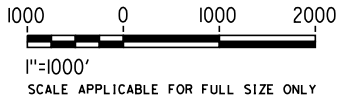
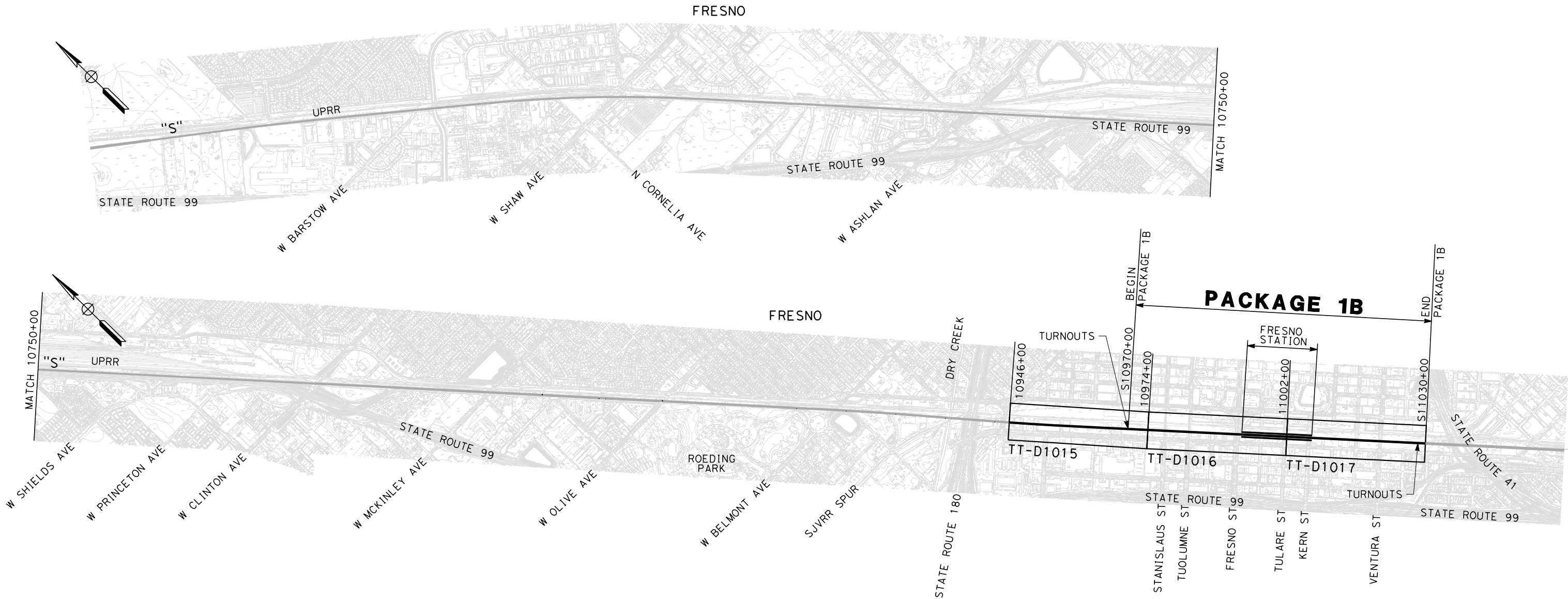
**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION**  
PACKAGE 1B  
GENERAL  
SURVEY CONTROL DATA  
SHEET 1 OF 1

CONTRACT NO.
DRAWING NO. VS-C0005
SCALE AS SHOWN
SHEET NO.

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REFER TO SCOPE OF WORK DOCUMENTATION IN THE PROCUREMENT PACKAGE FOR SCOPE REQUIREMENTS. FINAL DESIGN AND DIMENSIONS SHALL BE BASED ON DESIGN CRITERIA MANUAL, DIRECTIVE DRAWINGS, AND STANDARD DRAWINGS REQUIREMENTS.



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY K. SEYMOUR
DRAWN BY P. TONKIN
CHECKED BY D. HUNT
IN CHARGE R. COFFIN
DATE 3/01/12

PROPOSED  
PRELIMINARY  
DESIGN  
  
NOT FOR  
CONSTRUCTION

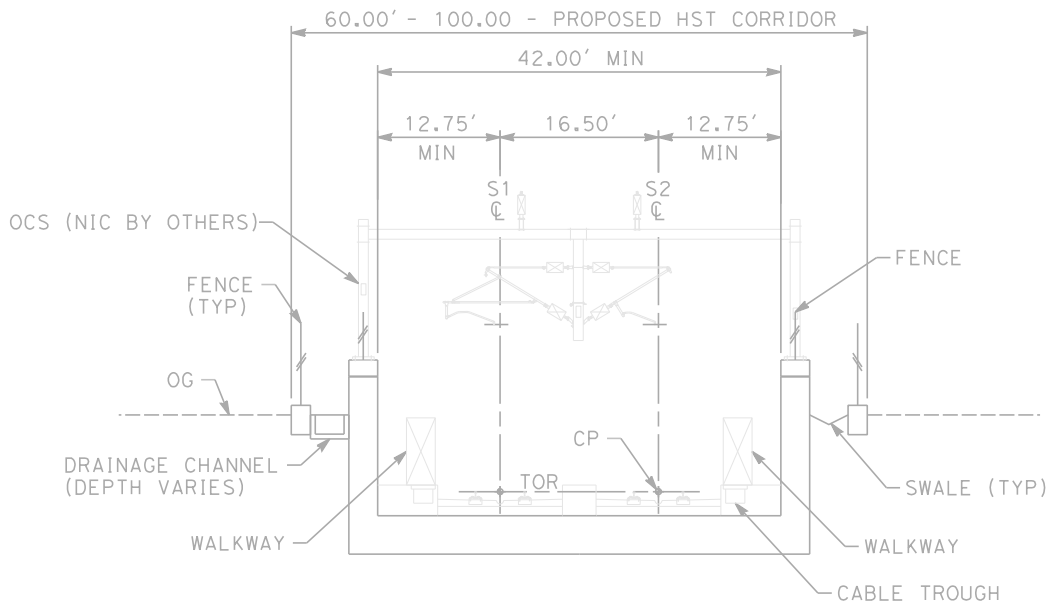


CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
TRACK GUIDEWAY  
KEY MAP

CONTRACT NO.
DRAWING NO. TT-B0003
SCALE AS SHOWN
SHEET NO.

Paul.Tonkin 2/15/2012 5:24:48 PM CAHSR-r1.tbl PDF\_half\_black\_200dpi.ppt\\global\\americas\\Jobs\\S-F\\31000\\31577\\4 Internal Project Data\\4-03 Drawings\\4-03-03-03 30% Design\\4-03-03-05 Design Sheets\\Rail\\18

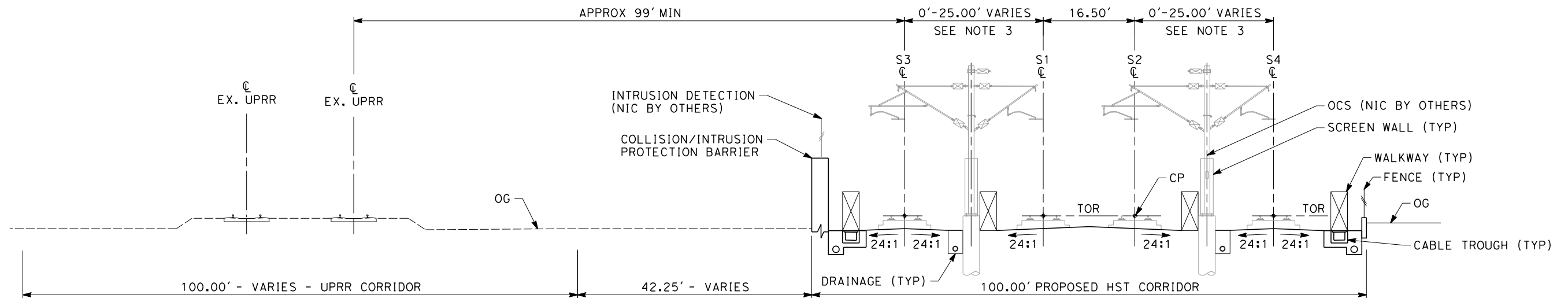


**SECTION 17**

(PACKAGE 1A)  
"S" 10951+00 THROUGH 10970+00  
TWIN TRACK IN GRADE SEPARATION

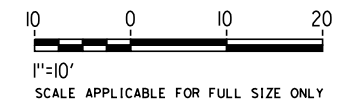
**NOTES:**

1. TRACKFORM SHOWN FOR INFORMATION ONLY (NIC BY OTHERS).
2. FOR STRUCTURAL DIMENSIONS SEE STRUCTURAL TYPICAL SECTIONS.
3. DISTANCE BETWEEN TRACKS VARIES FROM 0.00'-25.00' THROUGH TURNOUTS AND REVERSE TO PARALLEL.
4. COLLISION/INTRUSION PROTECTION BARRIER REQUIRED FROM STA 10806+00 - 10950+30 AND STA 10990+70 - 11030+00
5. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.



**SECTION 18**

(PACKAGE 1B)  
"S" 10970+00 THROUGH 10991+52  
"S" 10992+67 THROUGH 10992+95  
"S" 11007+05 THROUGH 11007+80  
"S" 11026+00 THROUGH 11030+00  
4 TRACK AT GRADE STATION APPROACH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY K. SEYMOUR
DRAWN BY P. TONKIN
CHECKED BY D. HUNT
IN CHARGE R. COFFIN
DATE 02/17/12

**PROPOSED  
PRELIMINARY  
DESIGN**

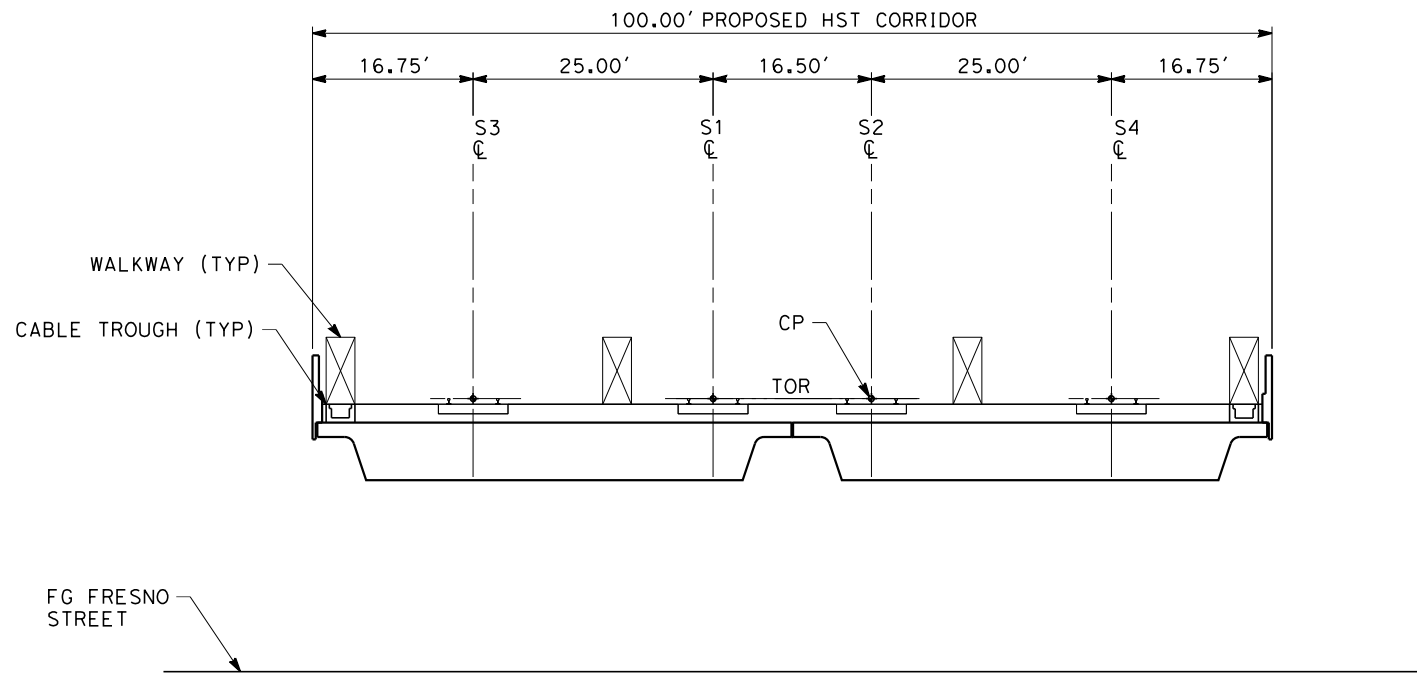
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**SIERRA SUBDIVISION**  
PACKAGE 1B  
TRACK GUIDEWAY  
TYPICAL SECTIONS

CONTRACT NO.
DRAWING NO. TT-D3009
SCALE AS SHOWN
SHEET NO.

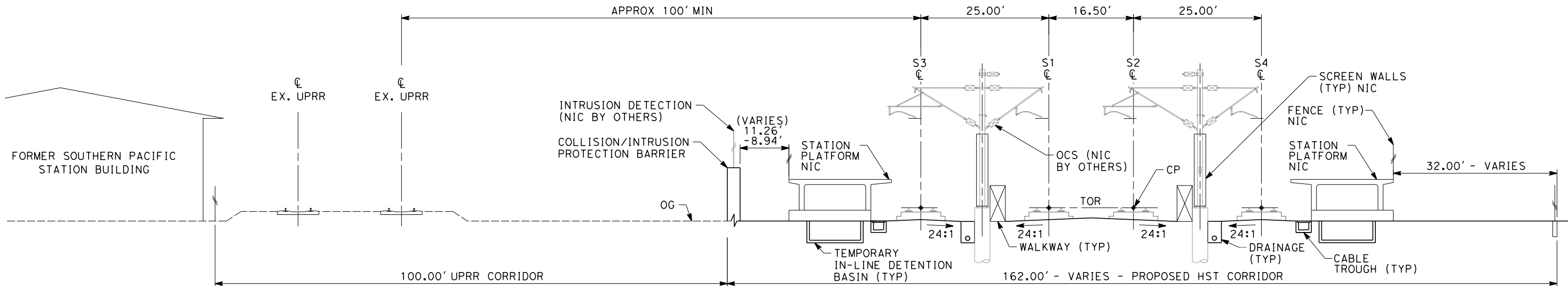
Paul.Tonkin 2/15/2012 5:24:49 PM CAHSR-r1.tbl PDF\_half\_black\_200dpi.ppt\\global\\americas\\Jobs\\S-F\\131000\\131577\\4 Internal Project Data\\4-03 Drawings\\4-03-03 30% Design\\4-03-03-05 Design Sheets\\Rail\\1B



- NOTES:**
1. TRACKFORM SHOWN FOR INFORMATION ONLY (NIC BY OTHERS).
  2. FOR STRUCTURAL DIMENSIONS SEE STRUCTURAL TYPICAL SECTIONS.
  3. COLLISION/INTRUSION PROTECTION BARRIER REQUIRED FROM STA 10990+70 - 11030+00

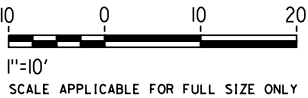
**SECTION 19**

"S" 10991+52 THROUGH 10992+67  
4 TRACK ON BRIDGE STRUCTURE



**SECTION 20**

"S" 10992+95 THROUGH 11007+05  
4 TRACK AT GRADE PLATFORMS



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY K. SEYMOUR
DRAWN BY P. TONKIN
CHECKED BY D. HUNT
IN CHARGE R. COFFIN
DATE 02/17/12

<b>PROPOSED PRELIMINARY DESIGN</b>
<b>NOT FOR CONSTRUCTION</b>

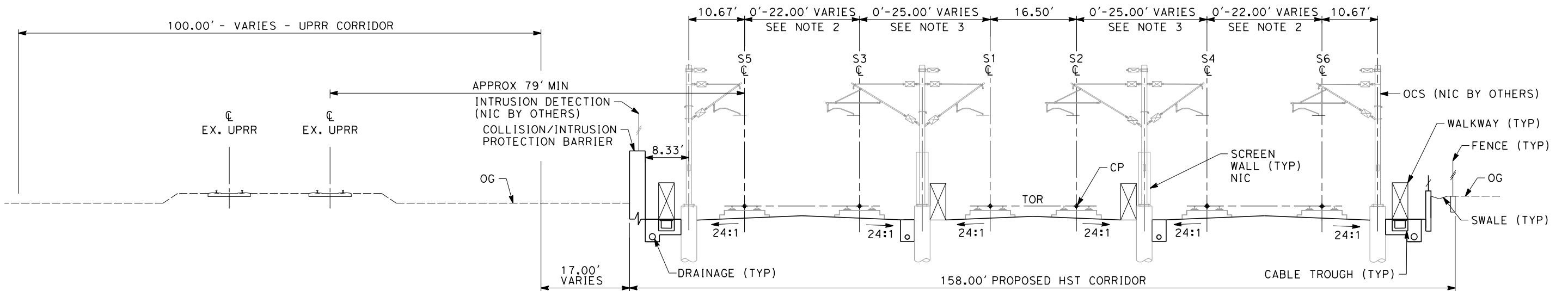


<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT</b>
<b>SIERRA SUBDIVISION</b>
PACKAGE 1B
TRACK GUIDEWAY
TYPICAL SECTIONS

CONTRACT NO.
DRAWING NO. TT-D3010
SCALE AS SHOWN
SHEET NO.



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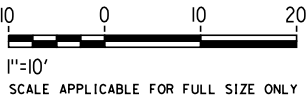


**NOTES:**

1. TRACKFORM SHOWN FOR INFORMATION ONLY (NIC BY OTHERS).
2. DISTANCE BETWEEN STORAGE TRACKS VARIES FROM 0.00'-22.00'.
3. DISTANCE BETWEEN TRACKS VARIES FROM 0.00'-25.00' THROUGH TURNOUTS AND REVERSE TO PARALLEL.
4. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.
5. COLLISION/INTRUSION PROTECTION BARRIER REQUIRED FROM STA 10990+70 - 11030+00

**SECTION 21**

"S" 11007+80 THROUGH 11026+00  
6 TRACK AT GRADE INCLUDING STORAGE TRACKS



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY K. SEYMOUR
DRAWN BY P. TONKIN
CHECKED BY D. HUNT
IN CHARGE R. COFFIN
DATE 02/17/12

**PROPOSED  
PRELIMINARY  
DESIGN**

**NOT FOR  
CONSTRUCTION**

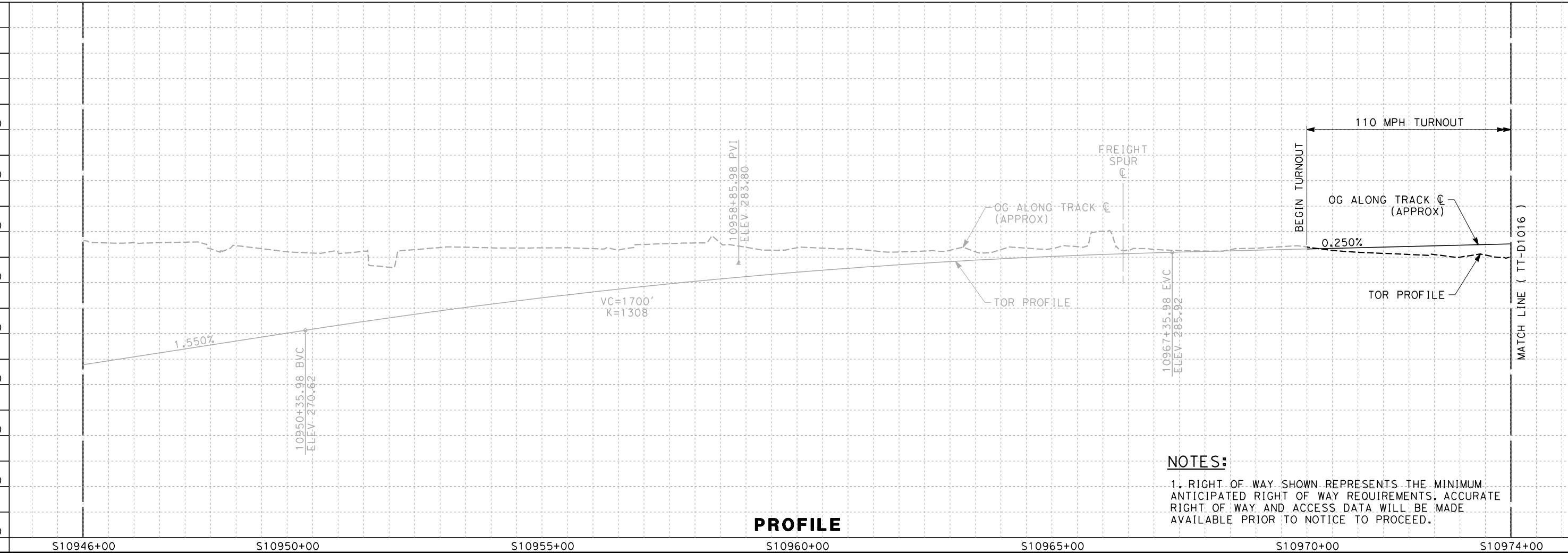
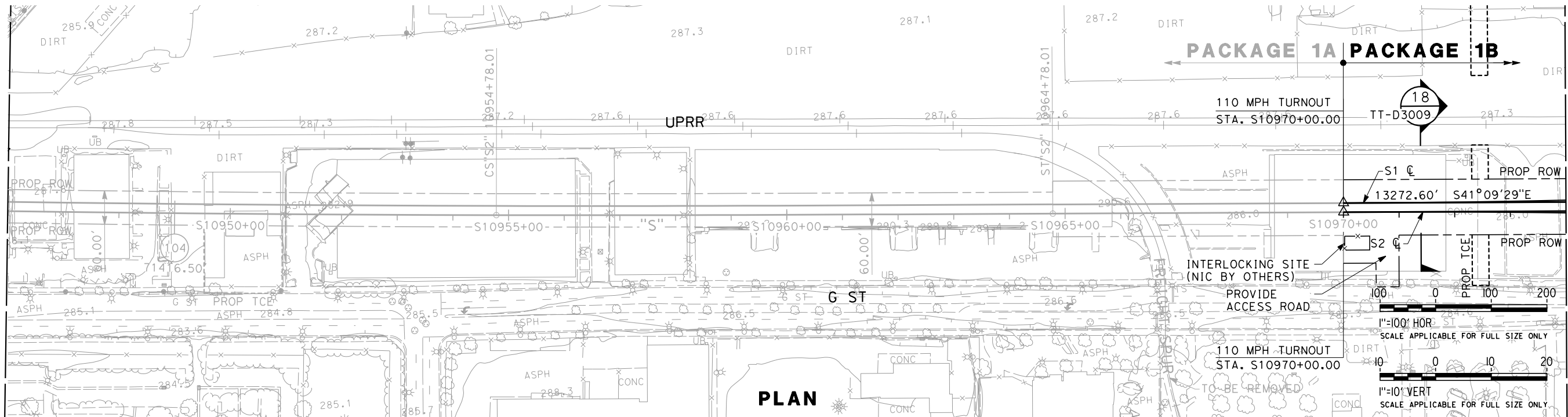
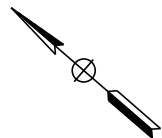


**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION**  
PACKAGE 1B  
TRACK GUIDEWAY  
TYPICAL SECTIONS

CONTRACT NO.
DRAWING NO. TT-D3011
SCALE AS SHOWN
SHEET NO.

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**NOTES:**  
1. RIGHT OF WAY SHOWN REPRESENTS THE MINIMUM ANTICIPATED RIGHT OF WAY REQUIREMENTS. ACCURATE RIGHT OF WAY AND ACCESS DATA WILL BE MADE AVAILABLE PRIOR TO NOTICE TO PROCEED.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY K. SEYMOUR
DRAWN BY P. TONKIN
CHECKED BY D. HUNT
IN CHARGE R. COFFIN
DATE 3/01/12

**PROPOSED  
PRELIMINARY  
DESIGN**

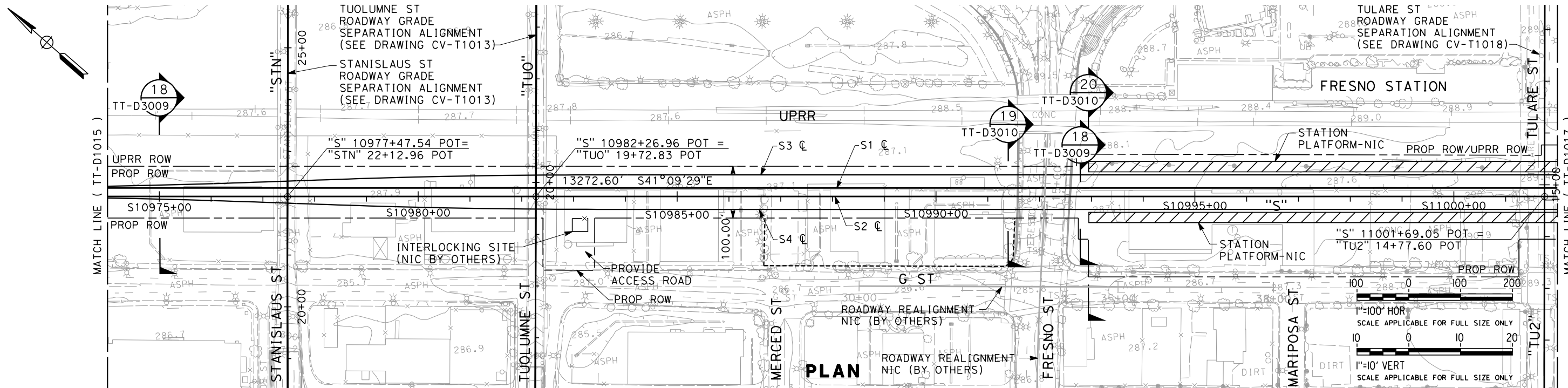
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION**  
PACKAGE 1B  
TRACK GUIDEWAY  
PLAN AND PROFILE  
STA. 10946+00 TO STA. 10974+00

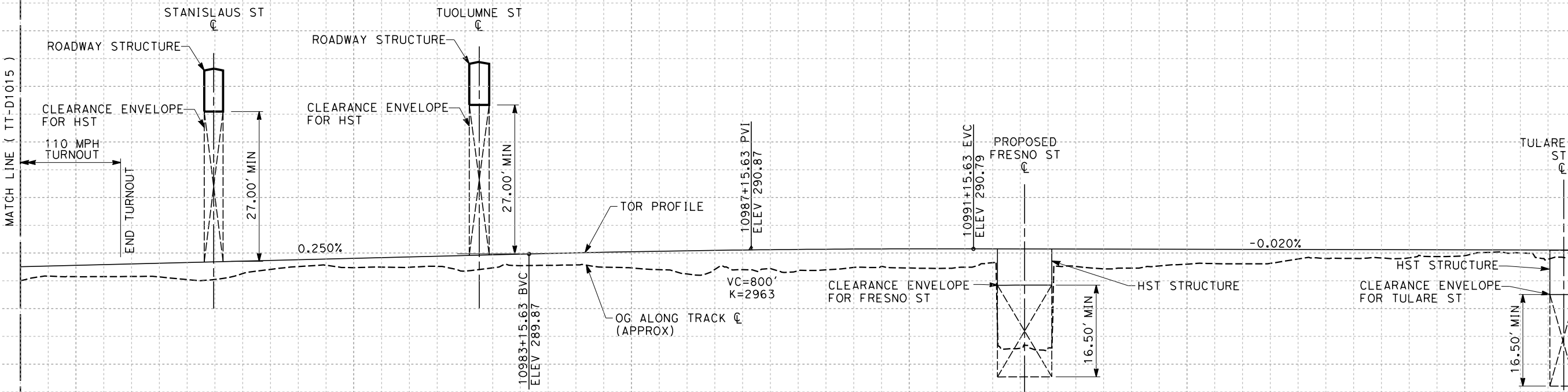
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SCALE AS SHOWN
SHEET NO.

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PLAN

NOTES:  
1. RIGHT OF WAY SHOWN REPRESENTS THE MINIMUM ANTICIPATED RIGHT OF WAY REQUIREMENTS. ACCURATE RIGHT OF WAY AND ACCESS DATA WILL BE MADE AVAILABLE PRIOR TO NOTICE TO PROCEED.



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

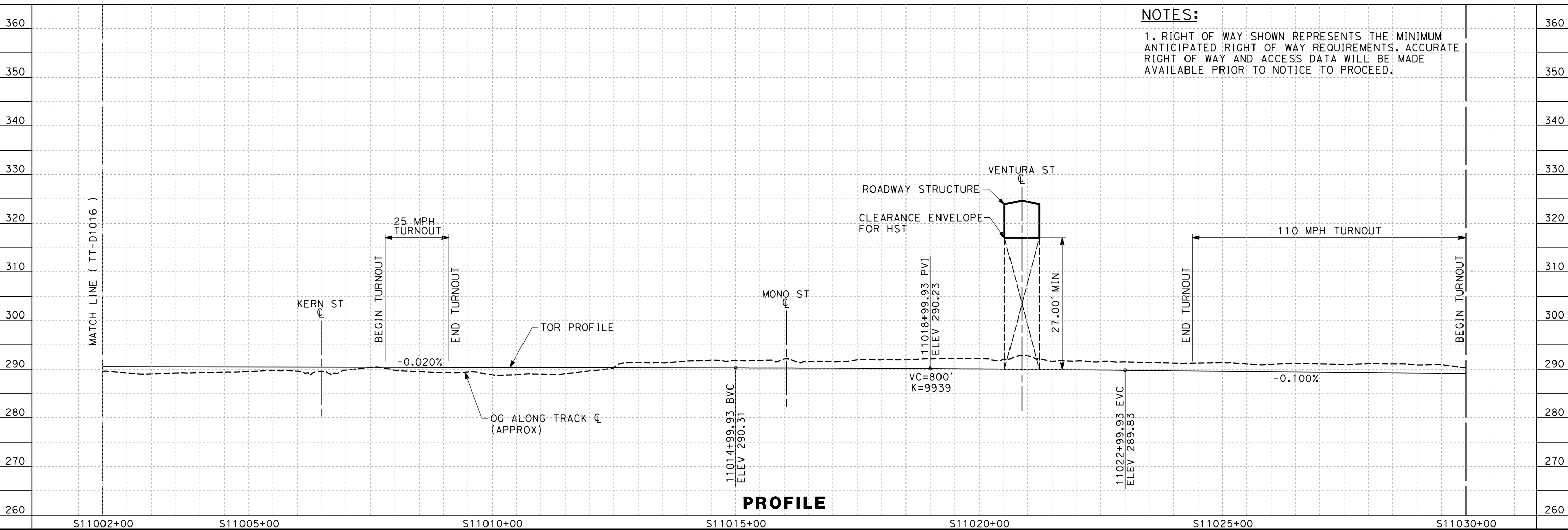
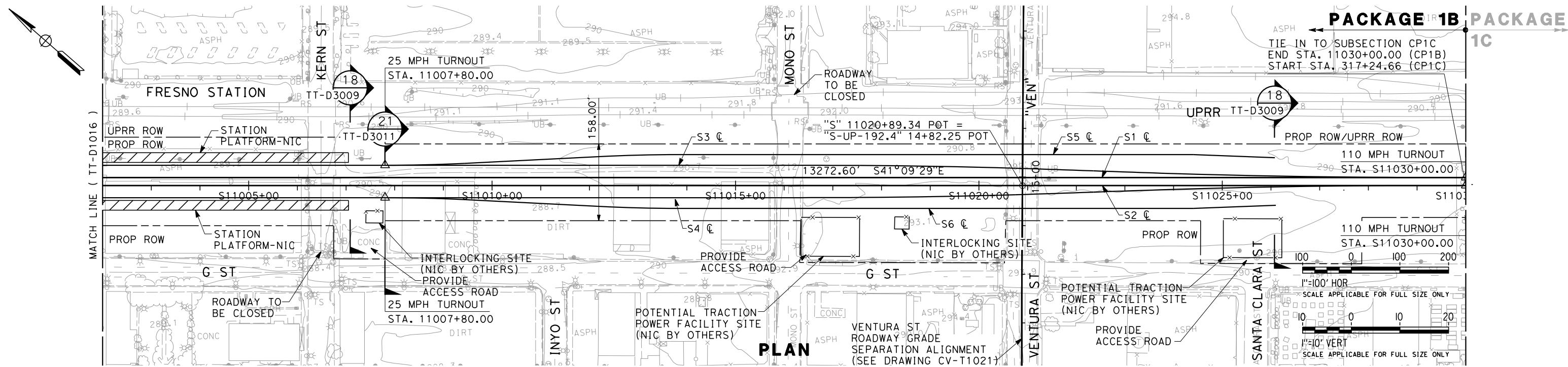
DESIGNED BY  
K. SEYMOUR  
DRAWN BY  
P. TONKIN  
CHECKED BY  
D. HUNT  
IN CHARGE  
R. COFFIN  
DATE  
3/01/12

PROPOSED  
PRELIMINARY  
DESIGN  
  
NOT FOR  
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
TRACK GUIDEWAY  
PLAN AND PROFILE  
STA. 10974+00 TO STA. 11002+00

CONTRACT NO.  
DRAWING NO.  
TT-D1016  
SCALE  
AS SHOWN  
SHEET NO.

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VOLUME 2 - TRACK STRUCTURES

DRAWING No.	REV	DRAWING DESCRIPTION
GE-A0011	B	PACKAGE 1B - TRACK STRUCTURES - INDEX OF DRAWINGS
ST-B0001		PACKAGE 1B - TRACK STRUCTURES - GENERAL NOTES - SHEET 1 OF 2
ST-B0002	A	PACKAGE 1B - TRACK STRUCTURES - GENERAL NOTES - SHEET 2 OF 2
ST-B0004	A	PACKAGE 1B - TRACK STRUCTURES - KEY MAP
ST-K1004	A	PACKAGE 1B - TRACK STRUCTURES - FRESNO STREET OVERPASS - PLAN AND ELEVATION
ST-K1005		PACKAGE 1B - TRACK STRUCTURES - TULARE STREET OVERPASS - PLAN AND ELEVATION
ST-K1006		PACKAGE 1B - TRACK STRUCTURES - TULARE STREET OVERPASS - UPRR BRIDGE - PLAN AND ELEVATION
ST-K1007	A	PACKAGE 1B - TRACK STRUCTURES - VENTURA STREET OVERPASS - PLAN AND ELEVATION
ST-K1008	A	PACKAGE 1B - TRACK STRUCTURES - VENTURA STREET OVERPASS - UPRR BRIDGE - PLAN AND ELEVATION

ADDENDUM 3 - RFP HSR 11-16

						DESIGNED BY R. DEASON	<div>PROPOSED PRELIMINARY DESIGN</div> <div>NOT FOR CONSTRUCTION</div>	 	<div>CALIFORNIA HIGH-SPEED TRAIN PROJECT SIERRA SUBDIVISION</div> <div>PACKAGE 1B GENERAL INDEX OF DRAWINGS</div>	CONTRACT NO.
						DRAWN BY V. ORTEGA				DRAWING NO. GE-A0011-B3
						CHECKED BY A. BRUNDAGE				SCALE NO SCALE
B	2012-06	ES	SB	RP	REVISED FOR ADDENDUM 3	IN CHARGE Q. EARLE				SHEET NO.
A	2012-05	AA	SB	RP	FRESNO STREET IN CONTRACT	DATE 06/12/12				
REV	DATE	BY	CHK	APP	DESCRIPTION					

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HST STRUCTURAL NOTES

A. SPECIFICATIONS FOR DESIGN AND CONSTRUCTION

1. CONSTRUCTION SPECIFICATION SHALL BE THE DESIGN-BUILD STANDARD SPECIFICATION, CALIFORNIA HIGH SPEED TRAIN, JUNE 2011.
2. THE STRUCTURAL DESIGN OF STRUCTURES SUPPORTING HIGH SPEED TRAINS SHALL BE BASED ON THE REQUIREMENTS OF THE CALIFORNIA HIGH SPEED TRAIN AUTHORITY.
3. DESIGN CRITERIA FOR HIGHWAY BRIDGES SHALL BE THE CALIFORNIA BRIDGE DESIGN SPECIFICATION. FOR HIGHWAY BRIDGES PASSING OVER THE HIGH SPEED TRAIN THE BRIDGE DESIGN SPECIFICATION SHALL BE SUPPLEMENTED BY THE CALIFORNIA HIGH SPEED TRAIN REQUIREMENTS FOR SEISMIC DESIGN.
4. DESIGN CRITERIA FOR RAILROAD STRUCTURES NOT SUPPORTING HIGH SPEED TRAINS SHALL BE THE AMERICAN RAILWAY ENGINEERING AND MAINTENANCE-OF-WAY ASSOCIATION (AREMA) MANUAL FOR RAILWAY ENGINEERING (APRIL 2008). FOR RAILROAD BRIDGES PASSING OVER THE HIGH SPEED TRAIN THE BRIDGE DESIGN SPECIFICATION SHALL BE SUPPLEMENTED BY THE CALIFORNIA HIGH SPEED TRAIN REQUIREMENTS FOR SEISMIC DESIGN.

B. DESIGN METHOD

1. DESIGN SHALL BE PERFORMED TO THE LOAD AND RESISTANCE FACTOR (LRFD) DESIGN METHOD.

C. GENERAL

1. FOR ACRONYMS AND ABBREVIATIONS SEE DRAWING STD-SB-001 THROUGH STD-SB-002.
2. ALL STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND ALL OTHER DRAWINGS RELATED TO THE WORK.
3. EMBEDDED ITEMS SUCH AS PIPES, INSERTS, SLEEVES AND CONDUITS, AND ANY RECESSES, NICHES OR OPENINGS REQUIRED FOR UTILITY, ARCHITECTURAL, MECHANICAL AND ELECTRICAL INSTALLATIONS ARE NOT SHOWN ON THE STRUCTURAL DRAWINGS. CONTRACTOR SHALL REFER TO THE UTILITY, ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR THE LOCATIONS AND DETAILS OF THESE ITEMS. CONTRACTOR SHALL REVIEW AND APPROVE ALL PENETRATIONS PRIOR TO CONSTRUCTION. PENETRATIONS WHICH LOCAL THICKENING OF CONCRETE OR STEEL MEMBERS AND /OR SUPPLEMENTAL REINFORCING SHALL BE SHOWN ON THE STRUCTURAL DRAWINGS.
4. THE VERTICAL CONTROL OF ALL TRACK STRUCTURES IS BASED ON THE CONTROL POINT AS DEFINED ON THE CROSS SECTION DRAWINGS.
5. CONTRACTORS ATTENTION IS DIRECTED TO THE AREAS OF SAG VERTICAL CURVES. IN SUCH AREAS CAUTION SHOULD BE EXERCISED THAT THE DIMENSION TO THE INVERT OF CONCRETE OF GUIDEWAY IS NEVER LESS THAN THAT SHOWN FOR INVERT DETAILS.

6. HORIZONTAL CONTROL FOR TRACK STRUCTURES SHOULD BE BASED ON THE VEHICLE CLEARANCE AND EQUIPMENT OPERATION AND MAINTENANCE REQUIREMENTS. CONTRACTOR SHALL EXERCISE NECESSARY CARE TO ASSURE THAT THE STRUCTURES ARE DESIGNED AND CONSTRUCTED TO THE INDICATED ALIGNMENT AND WITHIN THE SPECIFIED CLEARANCE CRITERIA AND TOLERANCES.
7. ALL CONSTRUCTION JOINTS IN EARTH RETAINING STRUCTURES AND IN STRUCTURES BELOW THE FINISH GRADE SHALL CONTAIN CONTINUOUS WATERSTOPS, AND SHALL HAVE REINFORCEMENT CONTINUOUS ACROSS ALL JOINTS. HYDROSWELLING STRIPS SHALL BE INSTALLED ON ALL JOINT SURFACES WHICH WILL BE EXPOSED TO EARTH.
8. ALL WATERSTOPS SHALL BE INSTALLED SECURELY IN ACCORDANCE WITH THE SPECIFICATIONS. THE WATERSTOPS SHALL BE PLACED CONTINUOUSLY THROUGHOUT THE LENGTH OF THE CONSTRUCTION JOINT. LAPPING OF WATERSTOPS SHALL NOT BE PERMITTED. SPLICING SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.
9. UNLESS INDICATED OTHERWISE, CONCRETE SURFACES LEADING TO DRAINS SHALL BE SLOPED A MINIMUM OF 1/8 INCH PER FOOT TOWARD THE DRAIN AND THE ADJACENT SURFACES WARPED AS REQUIRED TO SATISFY AN ADEQUATE DRAINAGE FLOW.

D. MATERIAL PROPERTIES

1. CONCRETE 28 DAY COMPRESSIVE STRENGTH (MINIMUM) UNLESS NOTED OTHERWISE

o) DRILLED SHAFTS: f'c=4500 PSI

b) PRECAST-PRESTRESSED PILES: f'c=6,500 PSI

c) FORMED CAST-IN-PLACE STRUCTURAL CONCRETE: f'c=5,000 PSI

d) PRECAST GIRDERS OR SEGMENTS OF GIRDERS: f'c=6,000 PSI

e) UNLESS NOTED OTHERWISE ON THE DRAWINGS, OR SPECIFIED, MINIMUM STRUCTURAL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI.

f) ALL EXPOSED CONCRETE EDGES AND CORNERS SHALL BE CHAMFERED WITH A 3/4 INCH, 45 DEGREE CHAMFER UNLESS NOTED OTHERWISE.
2. REINFORCING STEEL SHALL CONFORM TO THE SPECIFICATIONS OF ASTM A 706 GRADE 60.
3. PRESTRESSING STEEL

o) STRAND: ASTM A416/AASHTO M203, GRADE 270, LOW RELAXATION  
FRICTION COEFFICIENT: 0.25  
WOBBLE COEFFICIENT: 0.0002 PER FT  
ANCHOR SET: 0.375"  
APPARENT MODULUS: 28,500 KSI  
MINIMUM JACKING STRESS: 216 KSI (80% ULTIMATE)  
MAXIMUM ANCHORING STRESS: 189 KSI (70% ULTIMATE)  
MAXIMUM STRESS AFTER ANCHOR SET: 202 KSI (75% ULTIMATE)  
STRAND DIAMETER: 0.6" (AREA=0.216 SQ IN)

- b) POST TENSIONING BARS: ASTM A722/AASHTO M275, GRADE 150, TYPE II  
ANCHOR SET: 0.0625"  
APPARENT MODULUS: 30,000 KSI  
MAXIMUM JACKING STRESS: 113 KSI  
MAXIMUM ANCHORING STRESS: 105 KSI  
MAXIMUM STRESS AFTER LOSSES: 96 KSI

4. STRUCTURAL STEEL SHAPES SHALL CONFORM TO ASTM A6 WITH A YIELD STRENGTH OF FY = 50 KSI UNLESS NOTED OTHERWISE. THE FOLLOWING MATERIAL PROPERTIES SHALL APPLY:

- a) WIDE FLANGE SHAPES: ASTM A992
- b) M-SHAPES, S-SHAPES, HP SHAPES: ASTM A572
- c) ANGLES, CHANNELS: ASTM A572
- d) RECTANGULAR AND SQUARE HSS: ASTM A500 GR B (46 KSI)
- e) ROUND HSS: ASTM A500 GR B (42 KSI)
- f) STEEL PIPE: ASTM A53 GR B (35 KSI)
- g) PLATES, BARS: ASTM A36 (36 KSI)
- h) BOLTS: ASTM A325
- i) NUTS: ASTM A563
- j) WASHERS: ASTM F436

5. STEEL FABRICATIONS

- a) WELDING OF BUILT UP MEMBERS AND STEEL FABRICATIONS SHALL COMPLY WITH AASHTO/AWS D 1.5
- b) WELDING OF HSS SECTIONS AND PIPES SHALL COMPLY WITH AWS D 1.1
- c) MISCELLANEOUS STEEL ITEMS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION UNLESS COMPLETELY EMBEDDED IN CONCRETE AND UNLESS NOTED OTHERWISE.

6. FASTENERS

- a) ALL HIGH STRENGTH BOLTS NUTS AND WASHERS SHALL BE ZINC COATED
- b) ALL BOLTED CONNECTIONS SHALL COMPLY WITH RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (RCSC) "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS".
- c) ALL BOLTS ARE ASTM A325 HIGH STRENGTH SLIP CRITICAL WITH THREADS EXCLUDED FROM THE SHEAR PLANE

7. CONCRETE COVER

UNLESS OTHERWISE NOTED, MINIMUM CONCRETE COVER SHALL BE:

- a) DRILLED SHAFTS: 6"
- b) PIERS, COLUMNS, WALLS, BENT CAPS: 2"
- c) FOOTINGS AND CONCRETE CAST AGAINST EARTH: 3"

- d) SUPERSTRUCTURE (CAST-IN-PLACE, PRECAST) TOP OF DECK: 2.5"
- e) SUPERSTRUCTURE (CAST-IN-PLACE, PRECAST) EXTERIOR SURFACES: 2"
- f) SUPERSTRUCTURE (CAST-IN-PLACE, PRECAST) INTERIOR SURFACES: 1.5"
- g) CONCRETE SURFACES NOT EXPOSED TO WEATHER, SOIL OR WATER: PRINCIPAL REINFORCEMENT: 2" STIRRUPS, TIES AND SPIRALS: 1.5"

8. ALLOWABLE STRESSES IN POST-TENSIONED CONCRETE

- a) SUPERSTRUCTURE CONCRETE STRESSES AT THE SERVICE LIMIT STATE  
MAXIMUM COMPRESSION: 0.45 f'c (POST-TENSIONING AND PERMANENT LOADS)  
0.60 f'c (PERMANENT LOADS AND TRANSIENT LOADS)
- b) LONGITUDINAL TENSION  
NO TENSION STRESSES ARE ALLOWED IN PRECOMPRESSED TENSILE ZONE AFTER ALL LOSSES HAVE OCCURRED.
- c) PRINCIPAL TENSION STRESS: 0.1106 SQUARE ROOT f'c (KSI)
- d) THE SUPERSTRUCTURE SHALL BE DESIGNED FOR APPLICABLE SERVICE, STRENGTH AND EXTREME LIMIT STATES AS DEFINED BY THE LOAD GROUPS IN THE DESIGN MANUAL.

E. SEISMIC LOADING AND DESIGN

THERE ARE TWO LEVELS OF DESIGN EARTHQUAKES: THE MAXIMUM CONSIDERED EARTHQUAKE (MCE) AND THE OPERATING BASIS EARTHQUAKE (OBE) DEFINED AS:

1. MAXIMUM CONSIDERED EARTHQUAKE (MCE): GROUND MOTIONS CORRESPONDING TO GREATER OF (1) A PROBABILISTIC SPECTRUM BASED UPON A 10% PROBABILITY OF EXCEEDANCE IN 100 YEARS (i.e., A RETURN PERIOD OF 950 YEARS) AND (2) A DETERMINISTIC SPECTRUM BASED UPON THE LARGEST MEDIAN RESPONSE RESULTING FROM THE MAXIMUM RUPTURE (CORRESPONDING TO M<sub>u</sub>) OF ANY FAULT IN THE VICINITY OF THE STRUCTURE.
2. OPERATING BASIS EARTHQUAKE (OBE): GROUND MOTIONS CORRESPONDING TO A PROBABILISTIC SPECTRUM BASED UPON AN 86% PROBABILITY OF EXCEEDANCE IN 100 YEARS (i.e., A RETURN PERIOD OF 50 YEARS).

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. ARMSTRONG
DRAWN BY F. PALERMO
CHECKED BY O. LUJ
IN CHARGE R. COFFIN
DATE 12/08/11

PROPOSED  
PRELIMINARY  
DESIGN

NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION

PACKAGE 1B  
TRACK STRUCTURES GENERAL NOTES  
SHEET 1 OF 2

CONTRACT NO.
DRAWING NO. ST-B0001
SCALE NO SCALE
SHEET NO.

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GENERAL NOTES  
LOAD AND RESISTANCE FACTOR DESIGN

DESIGN: HIGH SPEED RAIL DESIGN CRITERIA, AASHTO LRFD  
BRIDGE DESIGN SPECIFICATIONS 4TH EDITION AND  
CALTRANS AMENDMENTS, ACI 350 (WATER  
CONVEYING STRUCTURES) A

STANDARD  
SPECIFICATIONS: HIGH SPEED RAIL SPECIFICATIONS,  
CALTRANS STANDARD SPECIFICATIONS DATED MAY  
2006

SEISMIC  
DESIGN: HIGH SPEED RAIL DESIGN CRITERIA,  
CALTRANS SEISMIC DESIGN CRITERIA (SDC)  
VERSION 1.6, NOVEMBER 2010

LIVE LOADING: COOPER E50 - HST ROUTE  
COOPER E80 - UPRR ROUTE (INC SHOOFLYS) A

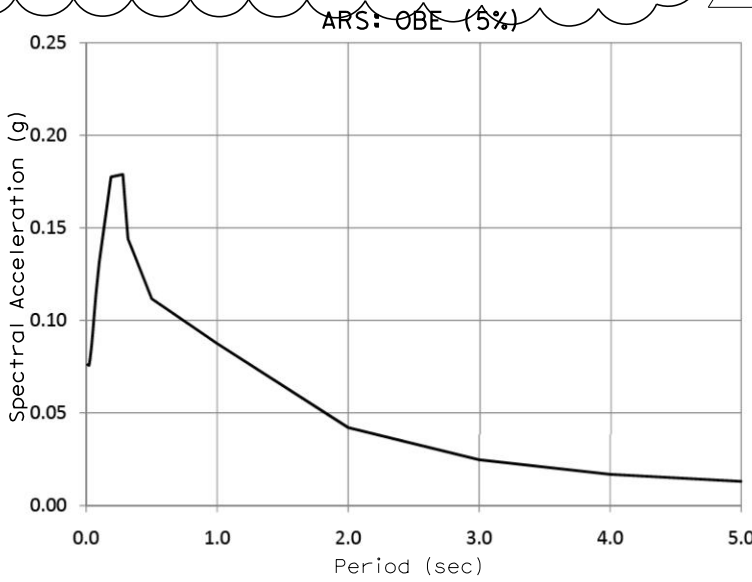
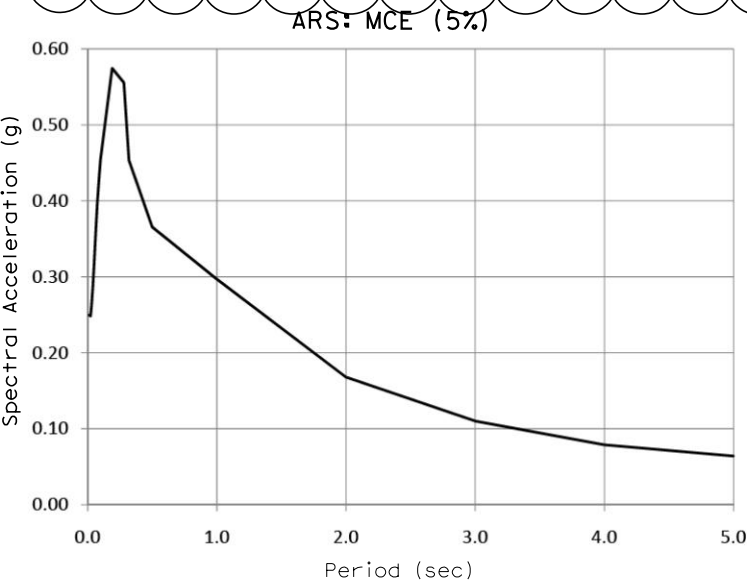
WIND LOAD: 100 MPH WIND VELOCITY

REINFORCED  
CONCRETE:  $f_y = 60$  KSI  
 $f'_c =$  SEE CONCRETE STRENGTH AND TYPE LIMITS

PRESTRESSED  
CONCRETE: LOW RELAXATION STRANDS  
 $f_{py} = 243$  KSI  
 $f_{pu} = 270$  KSI  
 $f'_{ci} = 5$  KSI AT TIME OF RELEASE  
 $f'_c = 7$  KSI AT 28 DAYS

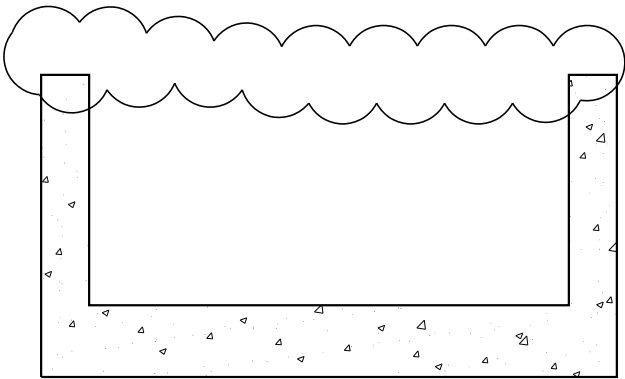
PILES+ CLASS 200 PILES B2-8  
CLASS 140 PILES B2-5  
CLASS 90 PILES

THE ARS CURVES SHOWN BELOW ARE FOR PRELIMIANRY DESIGN. REVISED ARS CURVES WILL BE PROVIDED FOR DETAILED DESIGN. A



GENERAL  
STRUCTURAL NOTES

- PILE/SHAFT LENGTHS TO BE DETERMINED.
- EMBEDDED ITEMS REQUIRED FOR UTILITY  
INSTALLATIONS ARE NOT SHOWN ON THE STRUCTURAL  
DRAWINGS. CONTRACTOR SHALL REFER TO THE UTILITY  
DRAWINGS FOR THE LOCATIONS AND DETAILS OF  
THESE ITEMS.
- MSE WALL REINFORCEMENT AND PANEL TO BE  
DETERMINED.
- BRIDGE ARTICULATION IS DENOTED BY:  
'M' FOR MOVING SUPPORTS (SLIDING BEARINGS)  
AND  
'F' FOR FIXED SUPPORTS (FIXED BEARINGS OR  
CAST-IN COLUMNS).  
WHERE A COLUMN SUPPORTS TWO BEARING SETS, THE  
ARTICULATION OF EACH SET IS INDICATED  
SEPARATELY. A



STRUCTURAL CONCRETE, GRADE SEPARATION  
 $f'_c = 5$  ksi at 28 days

CONCRETE STRENGTH AND TYPE LIMITS  
NO SCALE

ADDENDUM 3 - RFP HSR 11-16

REV	DATE	BY	CHK	APP	DESCRIPTION
A	2012-06	FP	AA	RP	REVISED FOR ADDENDUM A

DESIGNED BY S.T. MAK
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 06/12/12

PROPOSED  
PRELIMINARY  
DESIGN  
  
NOT FOR  
CONSTRUCTION

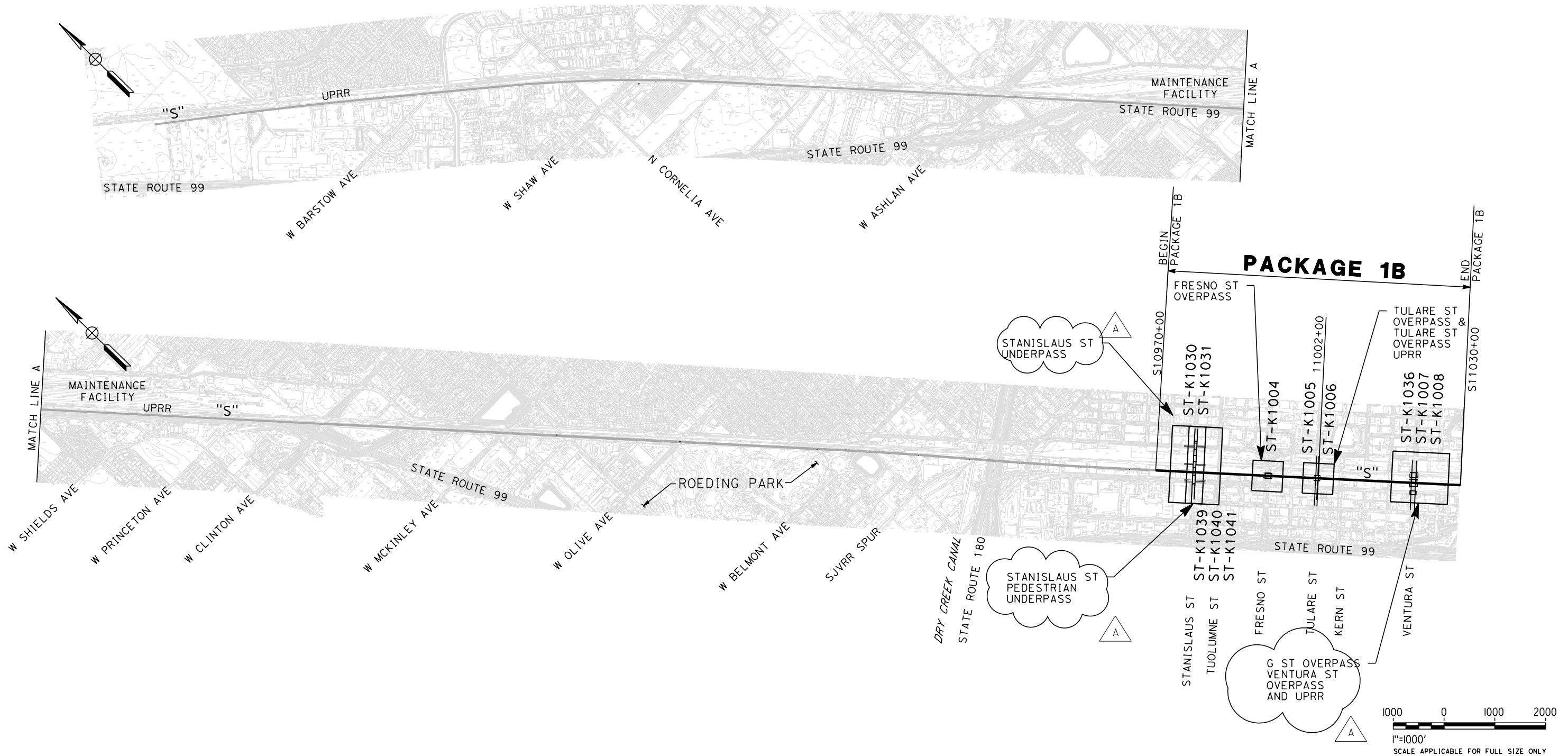


CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
TRACK STRUCTURES GENERAL NOTES  
SHEET 2 OF 2

CONTRACT NO.
DRAWING NO. ST-B0002-A3
SCALE AS SHOWN
SHEET NO.



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## ADDENDUM 3 - RFP HSR 11-16

REV	DATE	BY	CHK	APP	DESCRIPTION
A	2012-06	FP	AA	RP	REVISED FOR ADDENDUM A

DESIGNED BY S.T. MAK
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 06/12/12

**PROPOSED  
PRELIMINARY  
DESIGN**

**NOT FOR  
CONSTRUCTION**

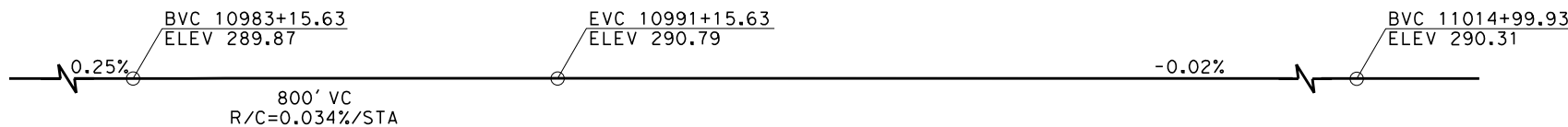


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION**

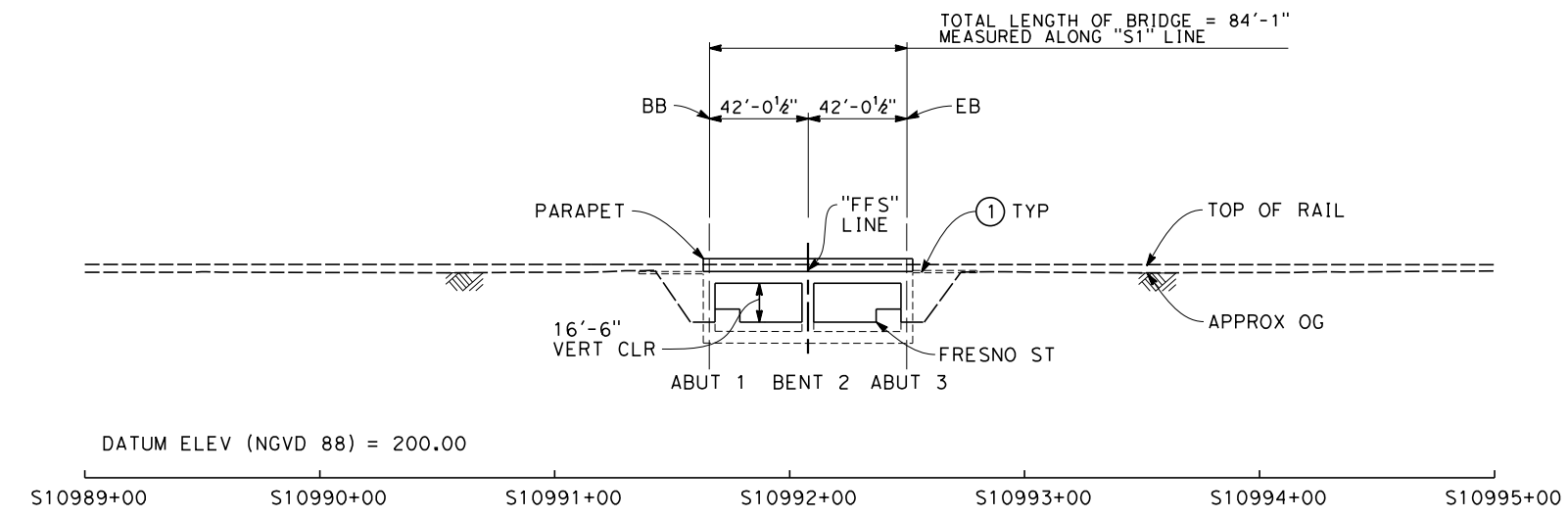
PACKAGE 1B  
TRACK STRUCTURES  
KEY MAP

CONTRACT NO.
DRAWING NO. ST-B0004-A3
SCALE AS SHOWN
SHEET NO.

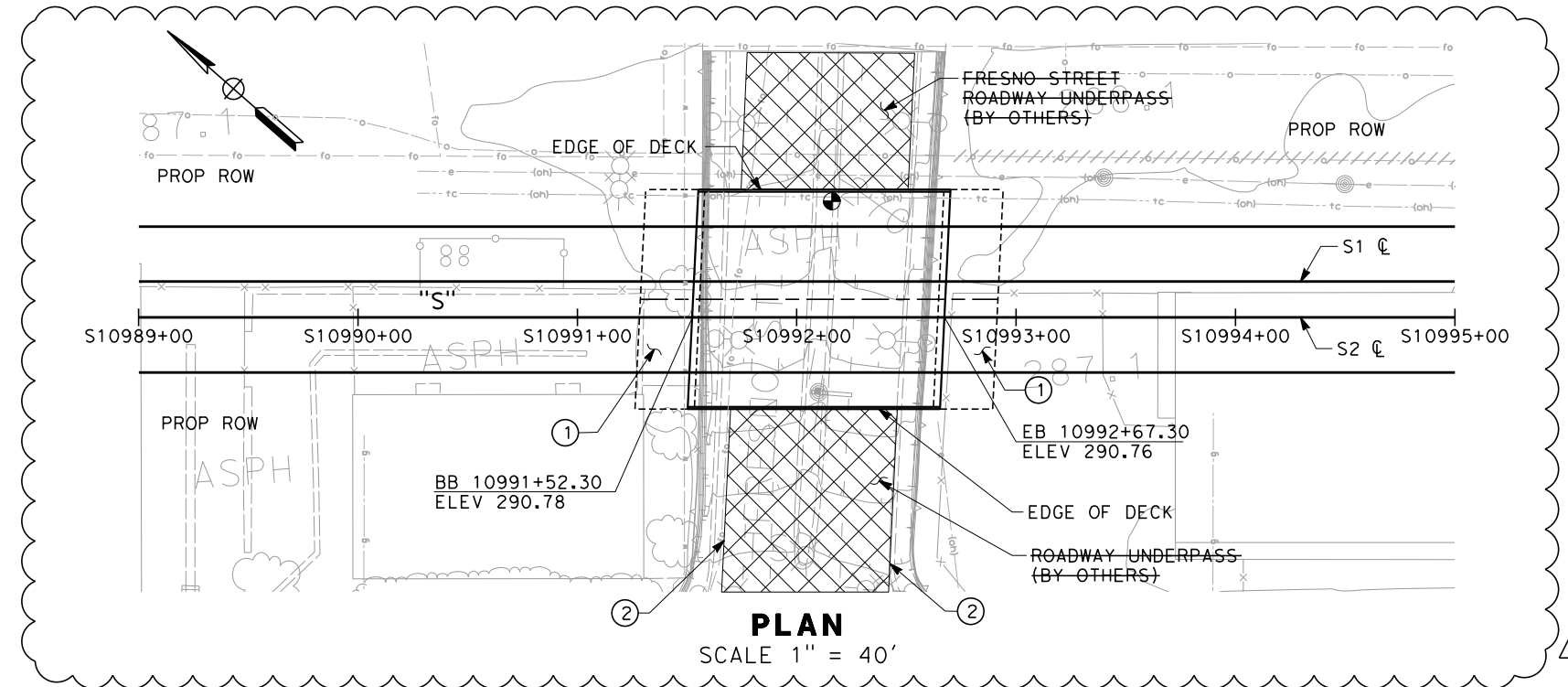
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TOP OF RAIL "S" LINE



ELEVATION  
SCALE 1" = 40'



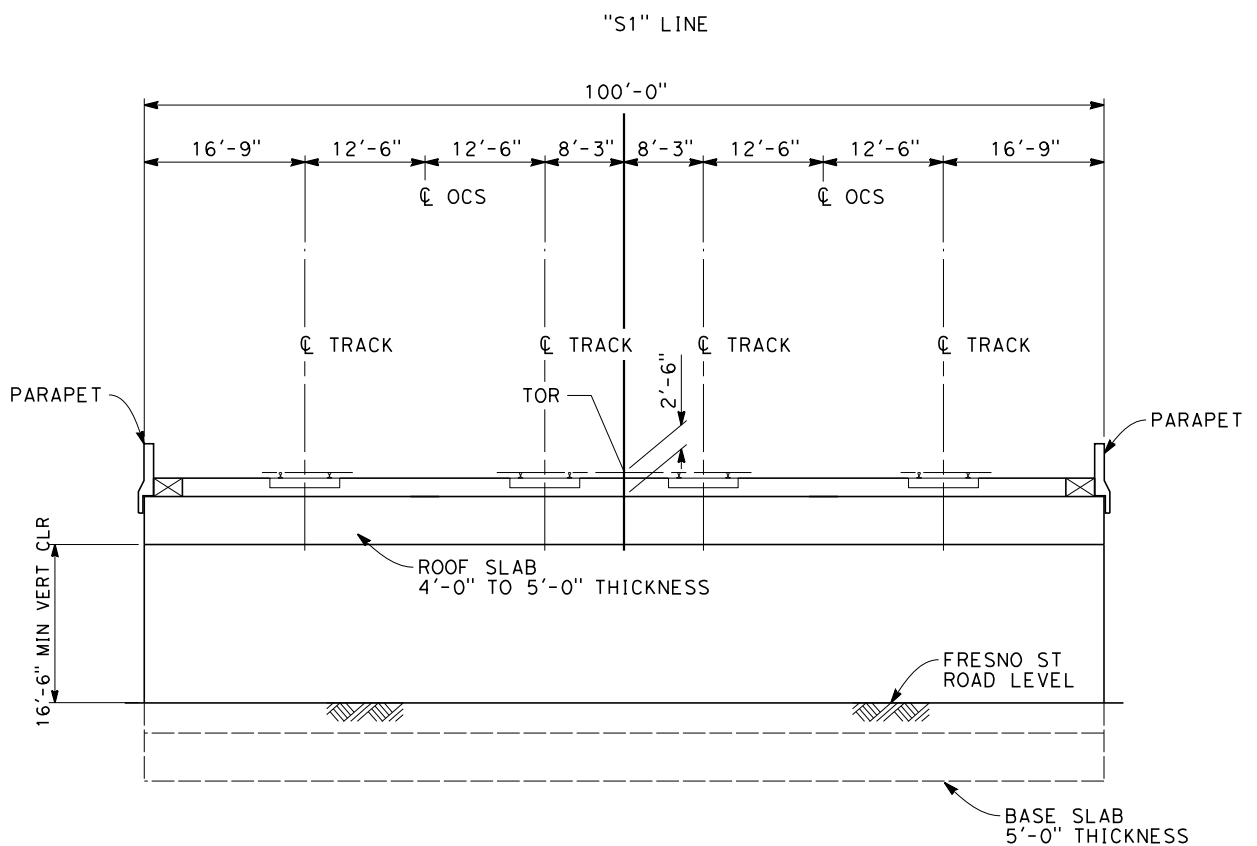
PLAN  
SCALE 1" = 40'

NOTES:

1. TRACK FORM SHOWN IS INDICATIVE.
2. DESIGN OF BRIDGE SHALL BE CAPABLE OF ACCOMODATING BOTH SLAB AND BALLASTED TRACK FORMS.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- ⊕ INDICATE POINT OF MINIMUM VERTICAL CLEARANCE
- ⊗ UNDERPASS (BY OTHERS)



SECTIONAL ELEVATION ON ABUTMENT  
SCALE 1" = 10'

ADDENDUM 2 - RFP HSR 11-16

REV	DATE	BY	CHK	APP	DESCRIPTION
A	2012-05	AA	SB	RP	FRESNO STREET IN CONTRACT

DESIGNED BY A. ARMSTRONG
DRAWN BY J. VALENZUELA
CHECKED BY O. LIU
IN CHARGE R. COFFIN
DATE 12/08/11

PROPOSED  
PRELIMINARY  
DESIGN  
  
NOT FOR  
CONSTRUCTION



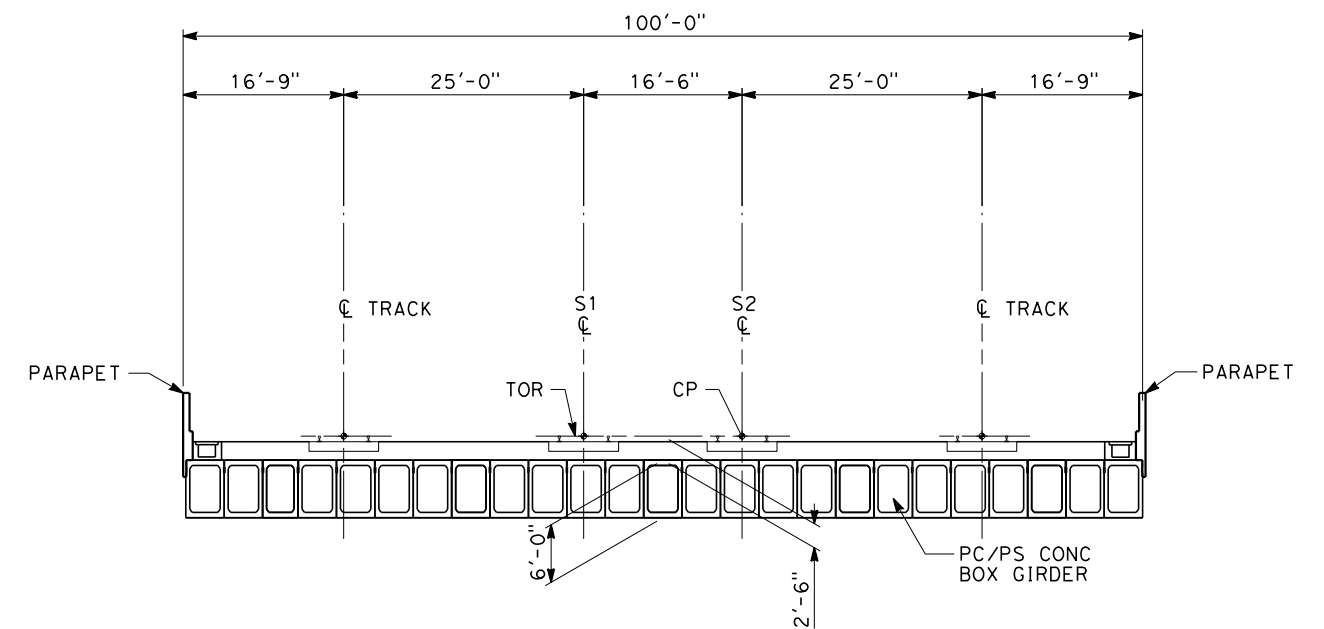
CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
TRACK STRUCTURES  
FRESNO STREET OVERPASS  
PLAN AND ELEVATION

CONTRACT NO.
DRAWING NO. ST-K1004-A2
SCALE AS SHOWN
SHEET NO.

05/31/2012 - ADDENDUM 2 - RFP HSR 11-16

**LEGEND:**

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE

[illegible]

DESIGNED BY	A. ARMSTRONG
DRAWN BY	J. VALENZUELA
CHECKED BY	Q. LIU
IN CHARGE	R. COFFIN
DATE	12/08/11

**PROPOSED  
PRELIMINARY  
DESIGN**

**NOT FOR  
CONSTRUCTION**

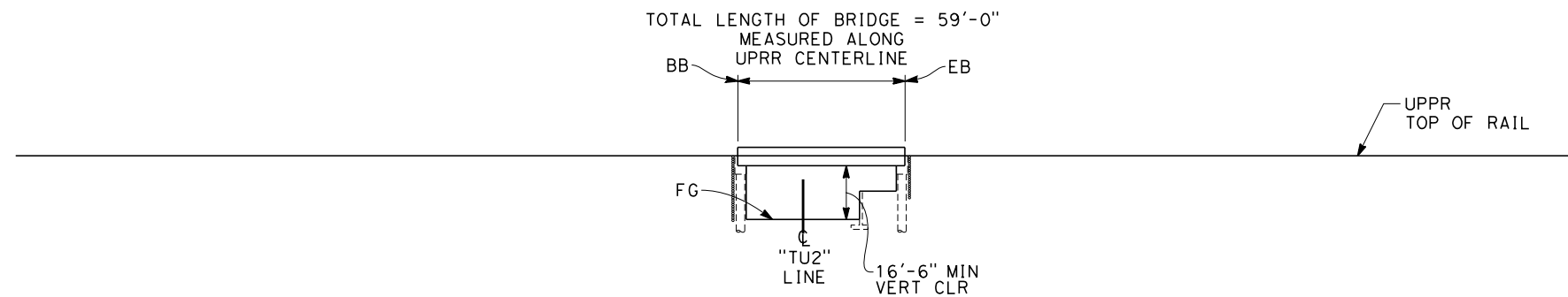


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**SIERRA SUBDIVISION**  
 PACKAGE 1B  
 TRACK STRUCTURES  
 TULARE STREET HST OVERPASS  
 PLAN AND ELEVATION

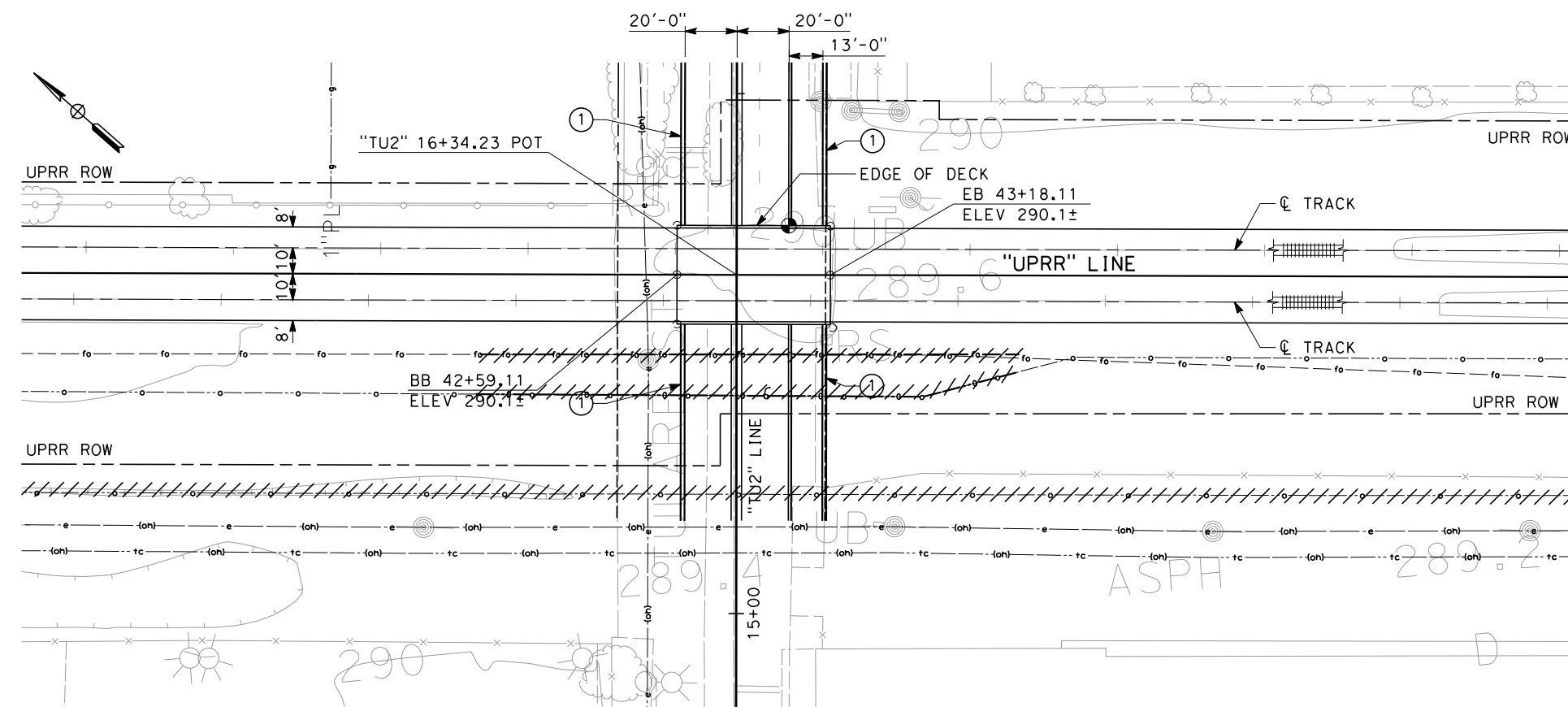
CONTRACT NO.
DRAWING NO. ST-K1005
SCALE AS SHOWN
SHEET NO.

REV	DATE	BY	CHK	APP	DESCRIPTION

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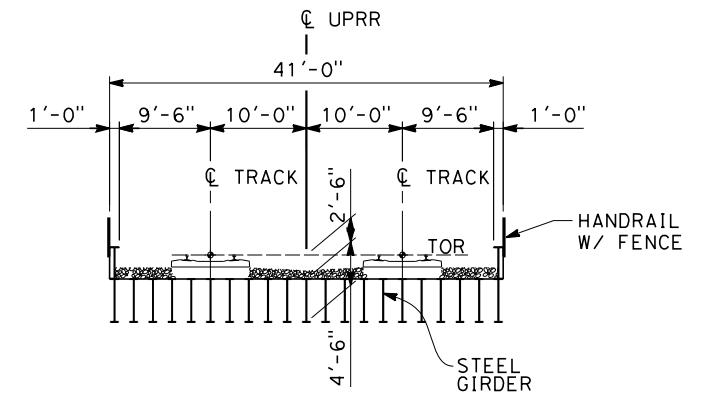
**ELEVATION**  
SCALE 1" = 30'



**PLAN**  
SCALE 1" = 30'

**LEGEND:**

- ① TANGENT PILE RETAINING WALL
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE



**TYPICAL SECTION**  
SCALE 1" = 10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. ARMSTRONG
DRAWN BY D. ORIZA
CHECKED BY O. LIU
IN CHARGE R. COFFIN
DATE 12/08/11

<b>PROPOSED PRELIMINARY DESIGN</b>
<b>NOT FOR CONSTRUCTION</b>



<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT</b>
<b>SIERRA SUBDIVISION</b>
PACKAGE 1B
TRACK STRUCTURES
TULARE STREET OVERPASS
UPRR BRIDGE - PLAN AND ELEVATION

CONTRACT NO.
DRAWING NO. ST-K1006
SCALE AS SHOWN
SHEET NO.

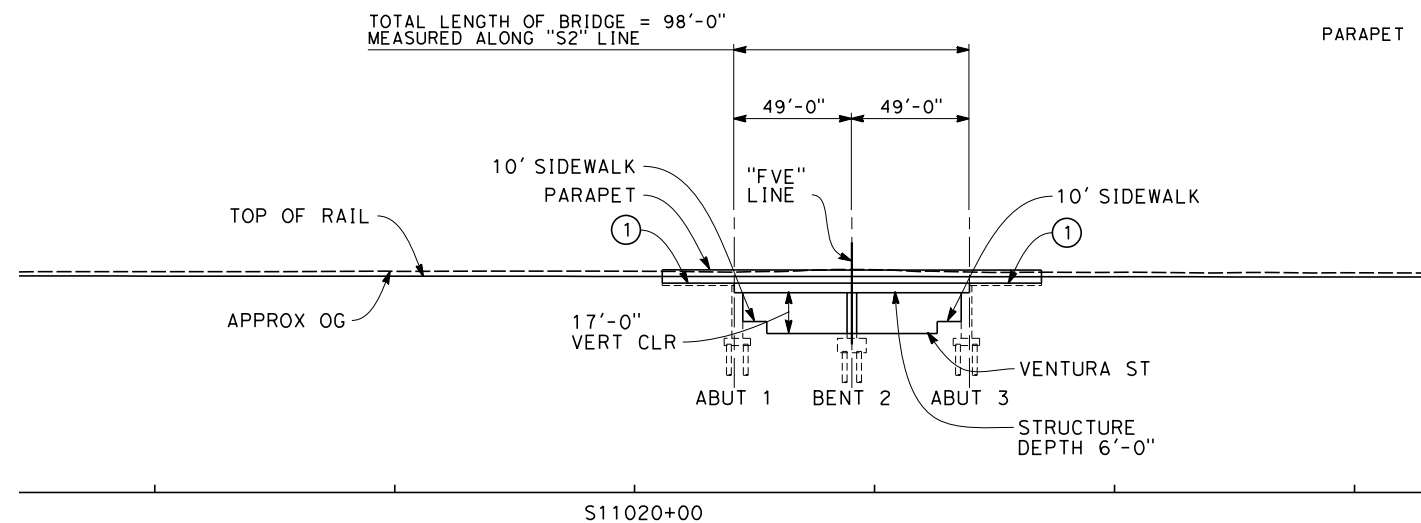


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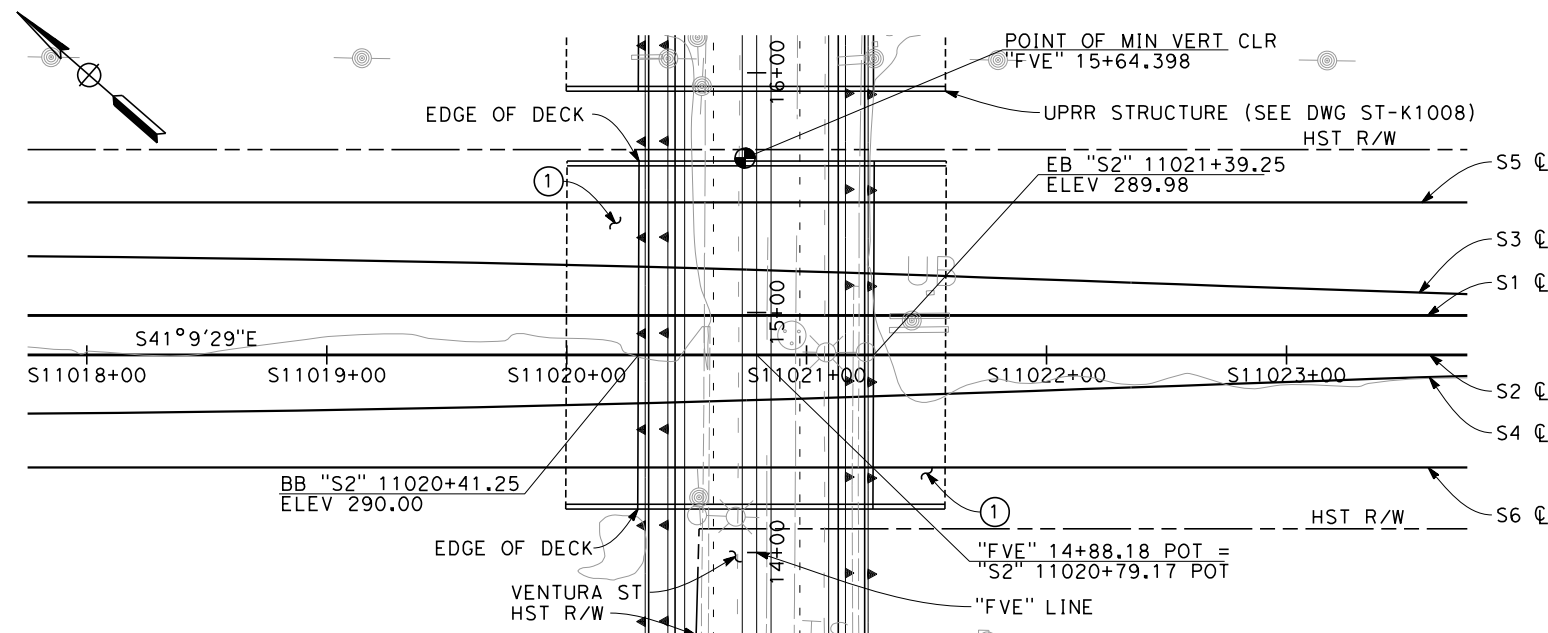
### TOP OF RAIL "S2" LINE

NO SCALE



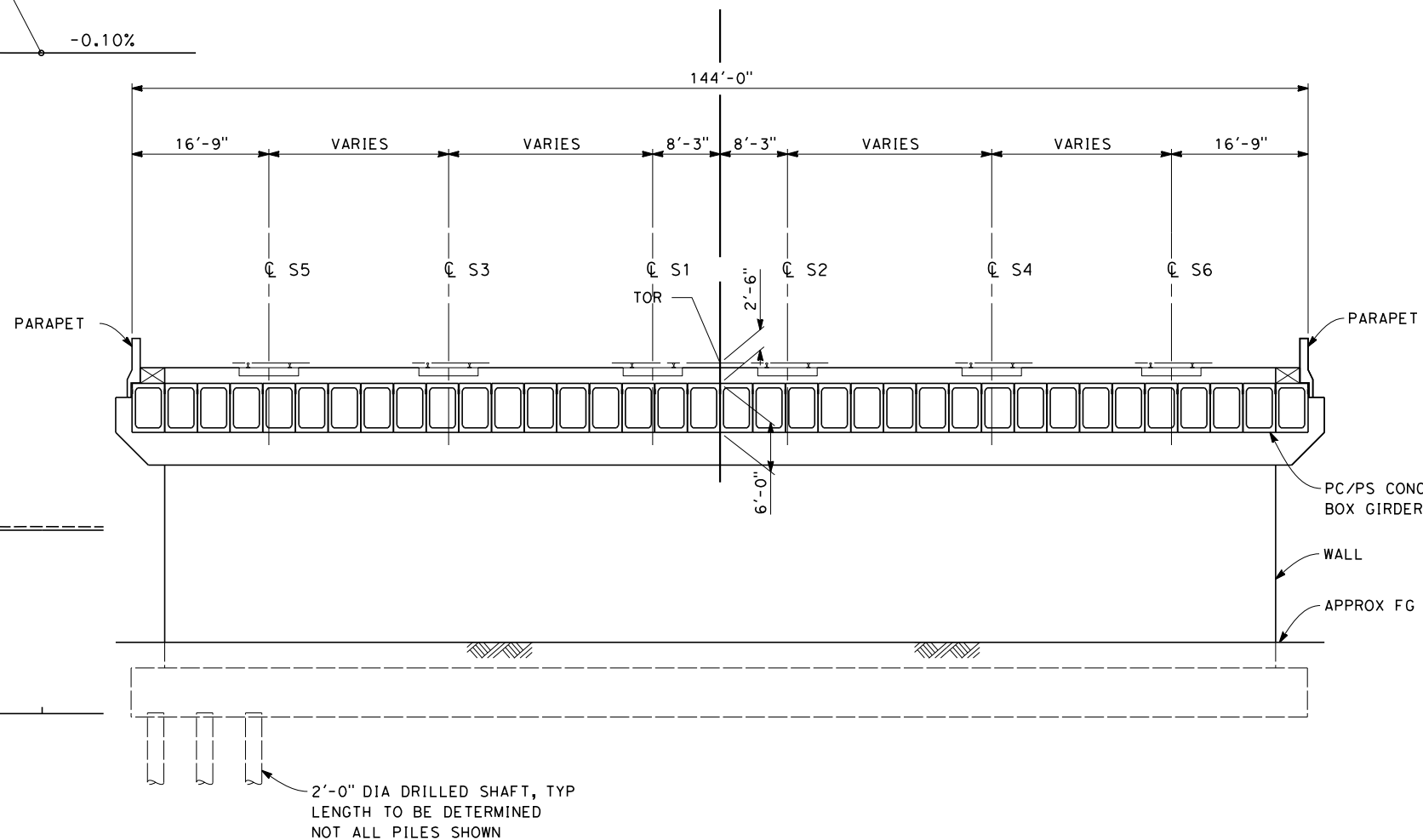
### ELEVATION

SCALE 1" = 40'



### PLAN

SCALE 1" = 40'



### TYPICAL SECTION

SCALE: 1" = 10'

#### NOTES:

- STRUCTURE APPROACH SLAB
- RETAINING WALL (TYPE TO BE DETERMINED)

## ADDENDUM 3 - RFP HSR 11-16

REV	DATE	BY	CHK	APP	DESCRIPTION
A	2012-06	FP	AA	RP	REVISED FOR ADDENDUM A

DESIGNED BY S.T. MAK
DRAWN BY J. VALENZUELA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 06/12/12

PROPOSED PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

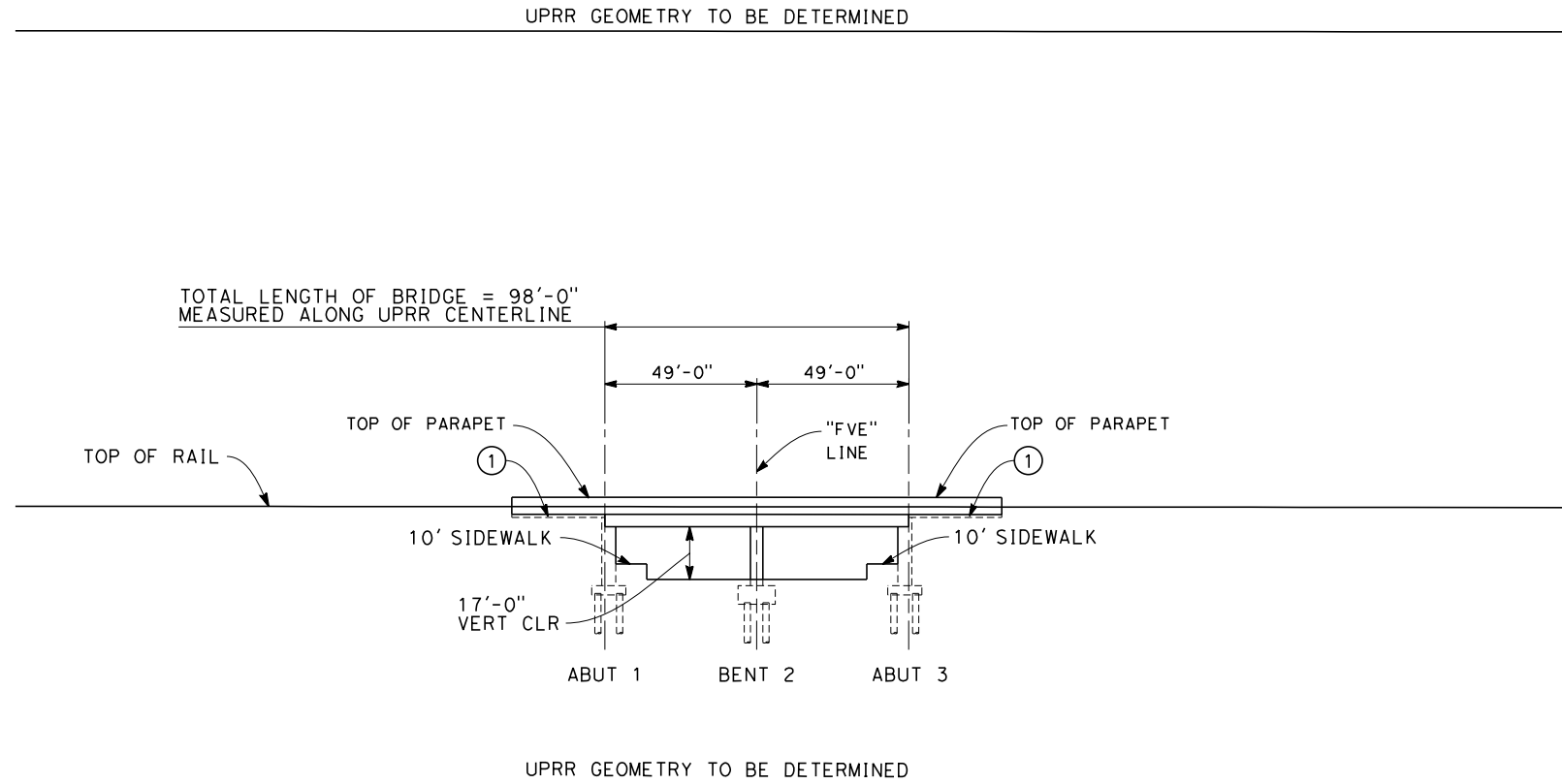


CALIFORNIA HIGH-SPEED TRAIN PROJECT SIERRA SUBDIVISION PACKAGE 1B TRACK STRUCTURES VENTURA STREET OVERPASS PLAN AND ELEVATION
--

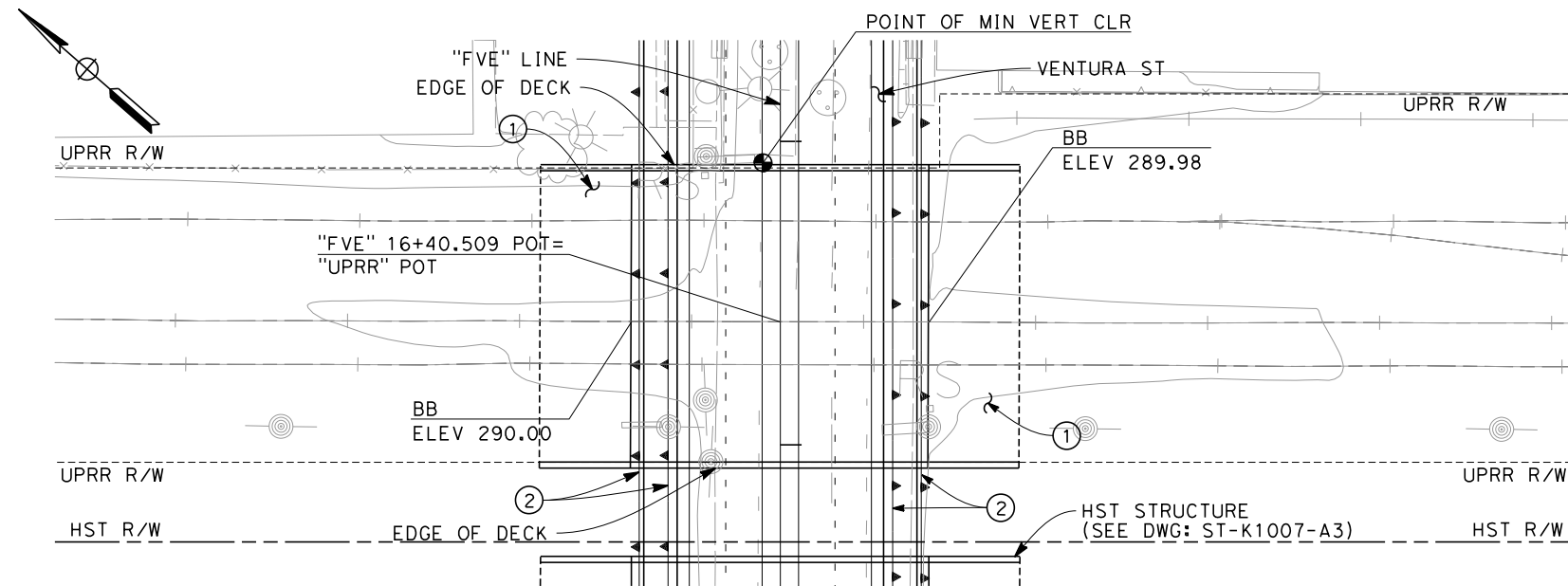
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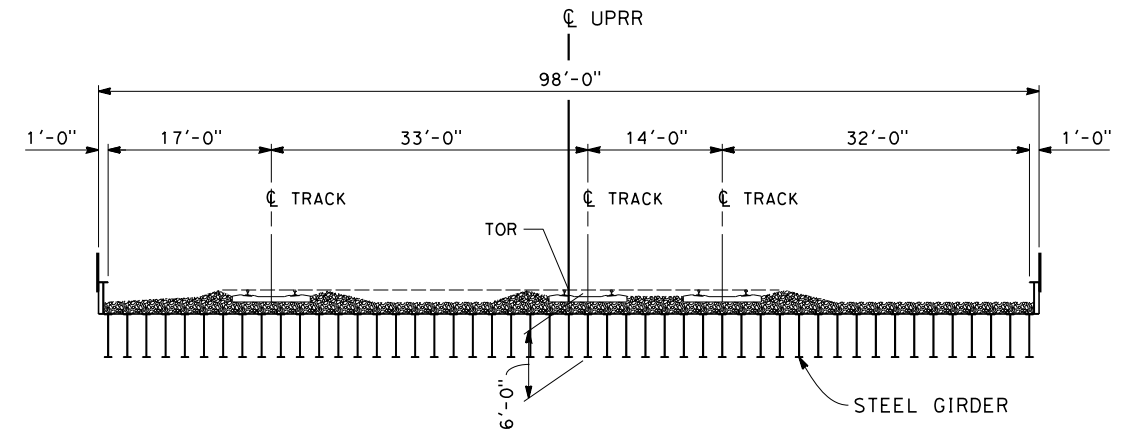
andrew.armstrong 06/22/2012 6:36:59 PM CAHSR-r1.tbl PDF\_half\_black\_200dpi.plt \\global\americas\Jobs\5-F\131000\131577\4 Internal Project Data\4-03 Drawings\4-03-03 30% Design\4-03-03-05 Design Sheets\Structu



**ELEVATION**  
SCALE: 1"=30'-0"



**PLAN**  
SCALE: 1"=30'-0"



**TYPICAL SECTION**  
SCALE: 1"=10'-0"

NOTES:

- ① APPROACH SLAB
- ② RETAINING WALL (TYPE TO BE DETERMINED)

**ADDENDUM 3 - RFP HSR 11-16**

REV	DATE	BY	CHK	APP	DESCRIPTION
A	2012-06	FP	AA	RP	REVISED FOR ADDENDUM A

DESIGNED BY S.T. MAK
DRAWN BY J. VALENZUELA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 06/12/12

**PROPOSED  
PRELIMINARY  
DESIGN**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION**  
PACKAGE 1B  
TRACK STRUCTURES  
VENTURA STREET OVERPASS  
UPRR BRIDGE - PLAN AND ELEVATION

CONTRACT NO.
DRAWING NO. ST-K1008-A3
SCALE AS SHOWN
SHEET NO.

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VOLUME 3 - ROADWAY WORK

DRAWING No.	REV	DRAWING DESCRIPTION
GE-A0012	A	PACKAGE 1B - ROADWAY - INDEX OF DRAWINGS
CV-B0005	A	PACKAGE 1B - ROADWAY - GENERAL NOTES
CV-B0006	A	PACKAGE 1B - ROADWAY - GENERAL STRUCTURAL NOTES
CV-B0007	A	PACKAGE 1B - ROADWAY - INDEX MAP
CV-T1013	<div><div>B</div><div>B</div></div>	PACKAGE 1B - ROADWAY - GRADE SEPARATION LAYOUT - STANISLAUS ST AND TUOLUMNE ST
CV-T1014	A	PACKAGE 1B - ROADWAY - GRADE SEPARATION PROFILE - STANISLAUS ST
CV-T1015	A	PACKAGE 1B - ROADWAY - GRADE SEPARATION PROFILE - TUOLUMNE ST
CV-T1018		PACKAGE 1B - ROADWAY - GRADE SEPARATION LAYOUT - TULARE ST (OVERPASS)
CV-T1019		PACKAGE 1B - ROADWAY - GRADE SEPARATION PROFILE - TULARE ST (OVERPASS)
CV-T1020		PACKAGE 1B - ROADWAY - GRADE SEPARATION PROFILE - G ST (TULARE ST OVERPASS)
<del>CV-T1021</del>		<del>PACKAGE 1B - ROADWAY - GRADE SEPARATION LAYOUT - VENTURA ST</del>
<del>CV-T1022</del>		<del>PACKAGE 1B - ROADWAY - GRADE SEPARATION PROFILE - VENTURA ST</del>
<del>CV-T1023</del>		<del>PACKAGE 1B - ROADWAY - GRADE SEPARATION PROFILE - G ST</del>
CV-T1024	A	PACKAGE 1B - ROADWAY - GRADE SEPARATION LAYOUT - FRESNO STREET
CV-T1025	A	PACKAGE 1B - ROADWAY - GRADE SEPARATION PROFILE - FRESNO STREET
CV-T1026	A	PACKAGE 1B - ROADWAY - GRADE SEPARATION PROFILE - G STREET AT FRESNO STREET
CV-T1027	A	PACKAGE 1B - ROADWAY - GRADE SEPARATION LAYOUT - VENTURA ST
CV-T1028	A	PACKAGE 1B - ROADWAY - GRADE SEPARATION PROFILE - VENTURA ST
CV-T1029	A	PACKAGE 1B - ROADWAY - GRADE SEPARATION PROFILE - F ST/G ST/H ST
CV-T3007	A	PACKAGE 1B - ROADWAY/GRADE SEPARATION - TYPICAL SECTIONS
CV-T3008	A	PACKAGE 1B - ROADWAY/GRADE SEPARATION - TYPICAL SECTIONS
CV-T3009	A	PACKAGE 1B - ROADWAY/GRADE SEPARATION - TYPICAL SECTIONS
CV-T3010	A	PACKAGE 1B - ROADWAY/GRADE SEPARATION - TYPICAL SECTIONS
CV-T3011	A	PACKAGE 1B - ROADWAY/GRADE SEPARATION - TYPICAL SECTIONS
CV-T3012	A	PACKAGE 1B - ROADWAY/GRADE SEPARATION - TYPICAL SECTIONS
CV-T3013	A	PACKAGE 1B - ROADWAY/GRADE SEPARATION - TYPICAL SECTIONS
ST-K1030	A	PACKAGE 1B - ROADWAY - DRAFT GENERAL PLAN - STANISLAUS ST - SHEET 1 OF 2
ST-K1031	A	PACKAGE 1B - ROADWAY - DRAFT GENERAL PLAN - STANISLAUS ST - SHEET 2 OF 2
<del>ST-K1032</del>		<del>PACKAGE 1B - ROADWAY - DRAFT GENERAL PLAN - TUOLMNE ST - SHEET 1 OF 2</del>
<del>ST-K1033</del>		<del>PACKAGE 1B - ROADWAY - DRAFT GENERAL PLAN - TUOLMNE ST - SHEET 2 OF 2</del>
ST-K1036	A	PACKAGE 1B - ROADWAY - DRAFT GENERAL PLAN - G ST (VENTURA ST OVERPASS)
<del>ST-K1037</del>		<del>PACKAGE 1B - ROADWAY - DRAFT GENERAL PLAN - VENTURA ST - SHEET 1 OF 2</del>
<del>ST-K1038</del>		<del>PACKAGE 1B - ROADWAY - DRAFT GENERAL PLAN - VENTURA ST - SHEET 2 OF 2</del>
<del>ST-K1039</del>		<del>PACKAGE 1B - ROADWAY - DRAFT GENERAL PLAN - STANISLAUS ST - PEDESTRIAN BRIDGE</del>
<del>ST-K1040</del>		<del>PACKAGE 1B - ROADWAY - DRAFT GENERAL PLAN - VENTURA ST - PEDESTRIAN BRIDGE</del>
ST-K1041	A	PACKAGE 1B - ROADWAY - DRAFT GENERAL PLAN - G ST (FRESNO ST OVERPASS)
ST-K1042	A	PACKAGE 1B - ROADWAY - DRAFT GENERAL PLAN - STANISLAUS ST - PEDESTRIAN BRIDGE
ST-K1043	B	PACKAGE 1B - ROADWAY - DRAFT GENERAL PLAN - STANISLAUS ST - PEDESTRIAN BRIDGE
<del>ST-K1044</del>	A	<del>PACKAGE 1B - ROADWAY - DRAFT GENERAL PLAN - STANISLAUS ST - PEDESTRIAN BRIDGE</del>

B

ADDENDUM 4 - RFP HSR 11-16

B	2012-07	IJ	BR	RP	REVISED FOR ADDENDUM 4
A	2012-06	VO	BR	RP	REVISED FOR ADDENDUM 3
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY R. DEASON
DRAWN BY V. ORTEGA
CHECKED BY A. BRUNDAGE
IN CHARGE O. EARLE
DATE 07/13/12



CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
GENERAL  
INDEX OF DRAWINGS

CONTRACT NO.
DRAWING NO. GE-A0012-B4
SCALE NO SCALE
SHEET NO.

J0553823 6/13/2012 8:56:39 AM CAHSR-r1.tbl CHSR\_PDF\_half\_black.pltG:\Sacramento\URS\235413 CA HSR Fresno Palmdale\16.0 Drawings\N-30% RBN5F Fresno\Sheet Files\General\X-GE-ANNO-GENERAL-NOTES.dgn

CIVIL GENERAL NOTES

A. CONTROL SURVEY AND MAPPING:

- 1. DESIGN WAS PREPARED USING TOPOGRAPHIC MAPPING OBTAINED FOR THE PURPOSE OF PRELIMINARY DESIGN IN ACCORDANCE WITH TECHNICAL MEMORANDUM 1.1.4 "ENGINEERING SURVEY AND MAPPING."
- 2. NAD 83 (NSRS2007), (1991.35) CALIFORNIA COORDINATE SYSTEM DATUM SHALL BE USED AS HORIZONTAL COORDINATE VALUES.
- 3. NAVD 88 VERTICAL DATUM SHALL TO BE USED AS VERTICAL DATUM.
- 4. MAPPING SHALL BE BASED ON CALIFORNIA COORDINATE SYSTEM (CCS 83) IN US CUSTOMARY UNITS.
- 5. NETWORK OF CONTROL SURVEY MONUMENTS WAS ESTABLISHED AT TWO MILE INTERVALS ALONG THE CHSTP ALIGNMENT. THESE CONTROL MONUMENTS SHALL BE USED IN FUTURE SURVEYS TO ENSURE THAT SURVEY ACTIVITIES ARE BASED ON THE SAME ADJUSTMENT POSITIONS AND EPOCH THAT TRANSITIONS BETWEEN ZONES OF THE CALIFORNIA COORDINATE SYSTEM ARE UNIFORM AND CORRECT.

B. GENERAL SITE NOTES

- 1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO THE COMMENCEMENT OF WORK AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE. CONTRACTOR IS RESPONSIBLE FOR VISITING THE SITE AND BECOMING FAMILIAR WITH THE SITE CONDITIONS PRIOR TO BIDDING.
- 2. ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH LOCAL AND STATE JURISDICTION INSPECTOR(S). CONTRACTOR SHALL NOTIFY LOCAL AND STATE JURISDICTION INSPECTOR(S) ----- DAYS PRIOR TO THE START OF ANY CONSTRUCTION.
- 3. ALL DAMAGE CAUSED BY THE CONTRACTOR AND/OR SUB-CONTRACTOR SHALL BE RESTORED TO AN "AS GOOD OR BETTER" CONDITION.
- 4. UPON COMPLETION, THE CONTRACTOR SHALL LEAVE THE PROJECT AREA FREE OF DEBRIS AND UNUSED MATERIAL.
- 5. FOR STANDARD GENERAL ABBREVIATIONS, SEE DRAWINGS SD-GE-001 THRU SD-GE-004.
- 6. FOR STANDARD GENERAL SYMBOLS, SEE DRAWINGS SD-GE-005 THRU SD-GE-007.
- 7. "ORIGINAL GROUND" SHOWN ON CROSS SECTIONS REFERS TO THE APPROXIMATE EXISTING GROUND LINE AT THE DESIGNATED CENTERLINE, BASELINE, LAYOUT LINE OR SECTION LINE.
- 8. THE CONTRACTOR SHALL MAINTAIN EXISTING SITE SURVEY CONTROL POINTS AND BENCH MARKS. SURVEY CONTROL POINTS OR BENCH MARKS DAMAGED OR REMOVED BY THE CONTRACTOR SHALL BE RESTORED BY A REGISTERED LAND SURVEYOR.
- 9. ALL WORK SHALL CONFORM TO ALL LOCAL, STATE AND FEDERAL CODES AND ORDINANCES IN EFFECT. CONTRACTOR SHALL PROVIDE AND MAINTAIN PROPER BARRICADES, RAILINGS, GUARDS, FLAGGING, LIGHTING, OR OTHER DEVICES NECESSARY FOR THE PROTECTION OF LIFE AND PROPERTY.

- 10. THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING MATERIALS.
- 11. ALL HORIZONTAL AND VERTICAL DISTANCES ARE IN FEET AND /OR DECIMALS OF FOOT EXCEPT AS NOTED OTHERWISE.
- 12. ACCESS ROAD TYPE SHALL BE CONFIRMED ON A SITE-BY-SITE BASIS.

C. DEMOLITION NOTES

- 1. CONTRACTOR MUST REVIEW ALL ENVIRONMENTAL STUDIES AND REQUIREMENTS PRIOR TO BIDDING.
- 2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TEMPORARY ACCESS DURING CONSTRUCTION. UTILITY OUTAGE AND ACCESS CLOSURES DURING CONSTRUCTION REQUIRE A MINIMUM OF ----- DAYS NOTICE TO OWNER OR SITE TENANTS.
- 3. CONTRACTOR SHALL FOLLOW LOCAL JURISDICTION REQUIREMENTS FOR CLEARING AND GRUBBING.

D. GRADING

- 1. NO CONTRACTOR SHALL PERFORM ANY GRADING OPERATION SO AS TO CAUSE FALLING ROCKS, SOIL OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATION OCCUR THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS NECESSARY.
- 2. THE CONTRACTOR SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM DUST NUISANCE.
- 3. PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATERS FROM DAMAGING THE CUT FACE OF AN EXCAVATION OR THE SLOPED SURFACES OF A FILL. FURTHERMORE, PROVISIONS SHALL BE MADE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE SITE.
- 4. ALL SLOPED AND EXPOSED AREAS SHALL BE SODDED OR PLANTED AS SOON AS FINAL GRADES HAVE BEEN ESTABLISHED. PLANTING SHALL NOT BE DELAYED UNTIL ALL GRADING WORK HAS BEEN COMPLETED. GRADING TO FINAL GRADE SHALL BE CONTINUOUS, AND ANY AREA WITHIN WHICH WORK HAS BEEN INTERRUPTED OR DELAYED SHALL BE PLANTED.
- 5. THE LIMITS OF THE AREA TO BE GRADED SHALL BE FLAGGED BEFORE THE COMMENCEMENT OF THE GRADING WORK.
- 6. ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE WATER POLLUTION CONTROL AND WATER QUALITY STANDARDS CONTAINED IN THE LATEST CALTRANS STORM WATER QUALITY HANDBOOKS.

E. TEMPORARY TRAFFIC CONTROL

- 1. CONTRACTOR SHALL APPLY OBTAIN APPROVAL FOR TRAFFIC CONTROL PLAN FROM AGENCY HAVING JURISDICTION OVER THE ROADWAY PRIOR TO IMPLEMENTATION OF TEMPORARY TRAFFIC CONTROL.

F. PUBLIC HEATH, SAFETY, AND CONVENIENCE NOTES

- 1. CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY, AND ENVIRONMENTAL QUALITY.
- 2. CONTRACTOR SHALL APPLY FOR A CONSTRUCTION PERMIT WITH A NOISE POLLUTION CONTROL PLAN.

G. STOCKPILING NOTES

- 1. IF THE STOCKPILING WORK INVOLVES CONTAMINATED SOIL, THEN ALL STOCKPILING WORK SHALL BE DONE IN CONFORMANCE WITH APPLICABLE STATE AND FEDERAL REQUIREMENTS.

H. GRUBBING AND CLEARING NOTES

- 1. WHERE APPLICABLE AND FEASIBLE THE MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE ANY GRUBBING WORK IS INITIATED.

I. ADDITIONAL INFORMATION

- 1. THE FOLLOWING TABLES PROVIDE INFORMATION ON THE DESIGN SPEED OF CITY OF FRESNO ROADWAYS WITHIN THE LIMITS OF WORK:

DESIGN SPEED TABLE		
STREET NAME	ALIGNMENT DESIGNATION	DESIGN SPEED (MPH)
STANISLAUS ST	STN	30
TUOLUMNE ST	TUO	30
TULARE ST (HST UNDERPASS)	TU1	30
TULARE ST (HST OVERPASS)	TU2	25
VENTURA ST	VEN	25
F ST (STANISLAUS ST)	FS	30
F ST (VENTURA ST)	FS	35
G ST (VENTURA ST)	GS	40
H ST (VENTURA ST)	HS	35
FRESNO ST (HST OVERPASS)	FFS	35
G ST (FRESNO ST)	GS2	40



ADDENDUM 3 - RFP HSR 11-16

A	2012-06	VO	BR	RP	REVISED FOR ADDENDUM 3
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY I. JOSIFEK
DRAWN BY V. ORTEGA
CHECKED BY B. RAWSON
IN CHARGE O. EARLE
DATE 06/12/12



CALIFORNIA HIGH-SPEED TRAIN PROJECT SIERRA SUBDIVISION	
PACKAGE 1B ROADWAY GENERAL NOTES	

CONTRACT NO.
DRAWING NO. CV-B0005-A3
SCALE AS SHOWN
SHEET NO.

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GENERAL NOTES  
LOAD AND RESISTANCE FACTOR DESIGN

DESIGN: HIGH SPEED RAIL DESIGN CRITERIA,  
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS  
4th EDITION AND CALTRANS AMENDMENTS

STANDARD SPECIFICATIONS: HIGH SPEED RAIL SPECIFICATIONS,  
CALTRANS STANDARD SPECIFICATIONS  
DATED MAY 2006

SEISMIC DESIGN: HIGH SPEED RAIL DESIGN CRITERIA,  
CALTRANS SEISMIC DESIGN CRITERIA (SDC)  
VERSION 1.6, NOVEMBER 2010

DEAD LOAD: INCLUDES 35 PSF FOR FUTURE WEARING SURFACE

LIVE LOADING: HL93 AND PERMIT DESIGN LOAD

WIND LOAD: 100 MPH WIND VELOCITY

REINFORCED CONCRETE:  $f_y = 60 \text{ ksi}$   
 $f'_c = \text{SEE CONCRETE STRENGTH AND TYPE LIMITS}$

PRESTRESSED CONCRETE: LOW RELAXATION STRANDS  
 $f_{py} = 243 \text{ ksi}$   
 $f_{pu} = 270 \text{ ksi}$   
 $f'_{ci} = 5 \text{ ksi AT TIME OF RELEASE}$   
 $f'_c = 7 \text{ ksi AT 28 DAYS}$

PILES:

CLASS 200 PILES



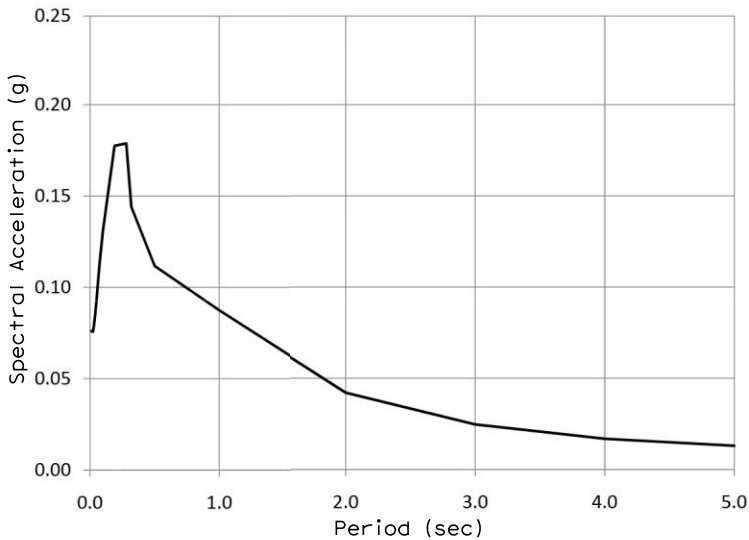
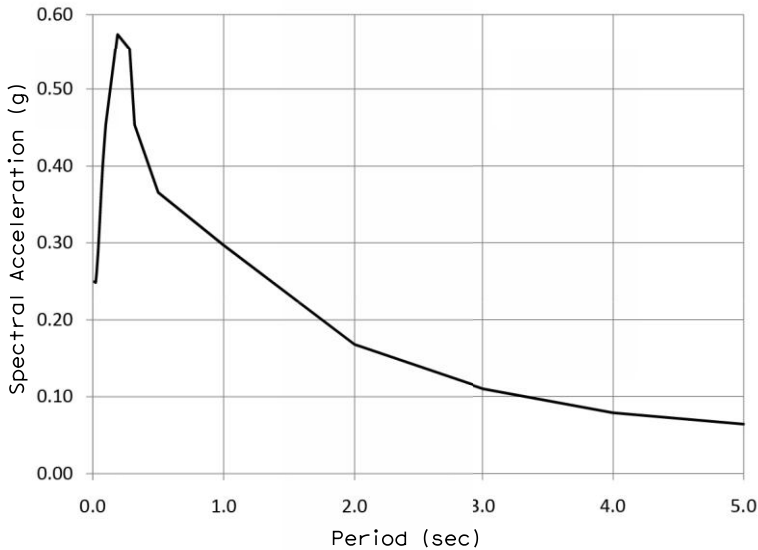
CLASS 140 PILES  
CLASS 90 PILES



THE ARS CURVES SHOWN BELOW ARE FOR PRELIMINARY DESIGN. REVISED ARS CURVES WILL BE PROVIDED FOR DETAILED DESIGN.

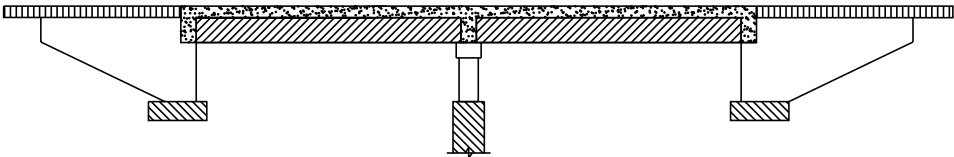
ARS: MCE (5%)

ARS: OBE (5%)



GENERAL  
STRUCTURAL NOTES

1. PILE/SHAFT LENGTHS TO BE DETERMINED
2. EMBEDDED ITEMS REQUIRED FOR UTILITY INSTALLATIONS ARE NOT SHOWN ON THE STRUCTURAL DRAWINGS. CONTRACTOR SHALL REFER TO THE UTILITY DRAWINGS FOR THE LOCATIONS AND DETAILS OF THESE ITEMS.
3. MSE WALL REINFORCEMENT AND PANEL TO BE DETERMINED
4. ALL STRUCTURAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AND OTHER DRAWINGS RELATED TO THE WORK.
5. ALL SPANS ARE DESIGNED CONTINUOUS FOR LIVE LOAD.



- STRUCTURAL CONCRETE, BRIDGE  
 $f'_c = 5 \text{ ksi AT 28 DAYS}$
- STRUCTURAL CONCRETE, APPROACH SLAB  
 $f'_c = 4 \text{ ksi AT 28 DAYS}$
- STRUCTURAL CONCRETE, SUPERSTRUCTURE  
 $f'_c = 5 \text{ ksi AT 28 DAYS}$
- STRUCTURAL CONCRETE, BRIDGE FOOTING  
 $f'_c = 4 \text{ ksi AT 28 DAYS}$
- PRECAST PRESTRESSED GIRDER  
 $f'_c = \text{SEE PRESTRESSED CONCRETE}$

CONCRETE STRENGTH AND TYPE LIMITS  
NO SCALE

ADDENDUM 3 - RFP HSR 11-16

REV	DATE	BY	CHK	APP	DESCRIPTION
A	2012-06	VO	BR	RP	REVISED FOR ADDENDUM 3

DESIGNED BY M. BURGARD
DRAWN BY D. BARNHART
CHECKED BY L. SMITH
IN CHARGE Y. BERI
DATE 06/12/12

PROPOSED  
PRELIMINARY  
DESIGN

NOT FOR  
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
ROADWAY  
GENERAL STRUCTURAL NOTES

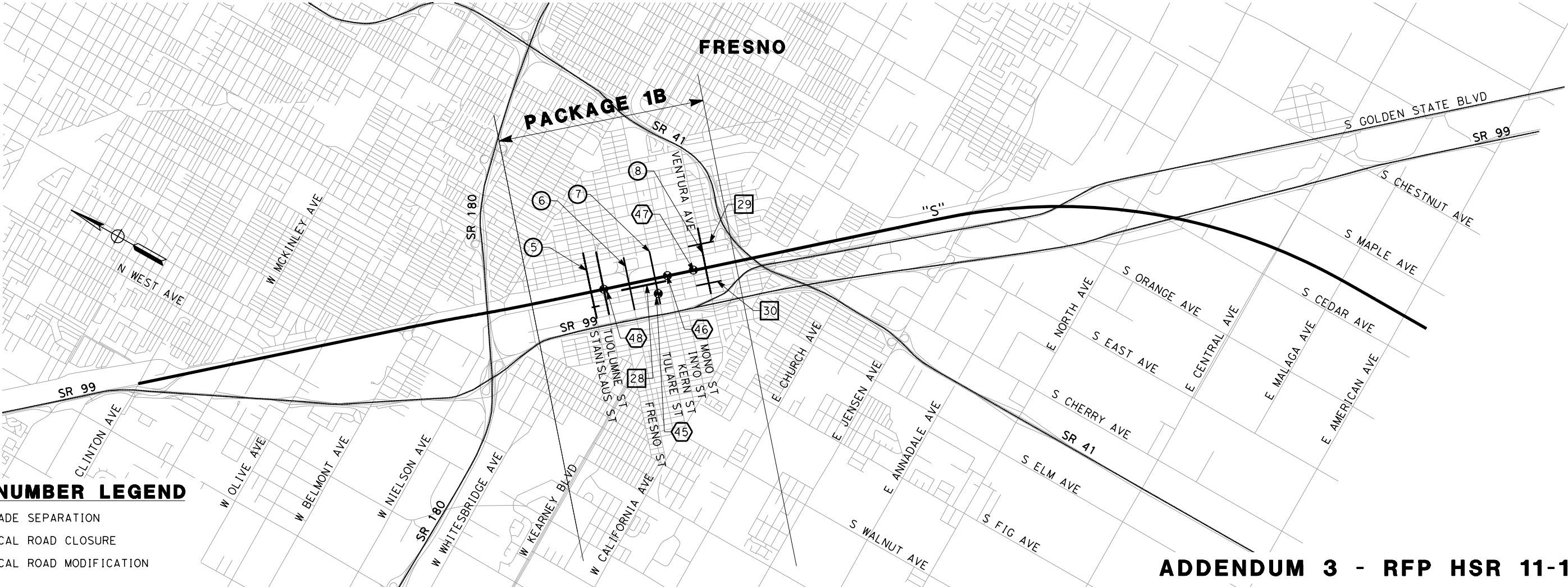
CONTRACT NO.
DRAWING NO. CV-B0006-A3
SCALE AS SHOWN
SHEET NO.



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NET53329



LOCATION NO.	SHEET TITLE	ROADWAY DWG NO.	STRUCTURE DWG NO.
5	GRADE SEPARATION - STANISLAUS ST	CV-T1013 - CV-T1014	ST-K1030 - ST-K1031
6	GRADE SEPARATION - FRESNO ST	CV-T1024 - CV-T1026	ST-K1041
7	GRADE SEPARATION - TULARE ST	CV-T1018 - CV-T1020	-
8	GRADE SEPARATION - VENTURA ST	CV-T1021 - CV-T1022	-
28	LOCAL ROAD - G ST	CV-T1018	ST-K1036
29	LOCAL ROAD - BROADWAY ST	CV-T1013	-
30	LOCAL ROAD - F ST	CV-T1013 & CV-T1023	-
45	ROAD CLOSURE - F ST (TULARE ST OH)	TO BE DONE BY OTHERS	-
46	ROAD CLOSURE - KERN ST	CV-T1016 & CV-T1018	-
47	ROAD CLOSURE - MONO ST	CV-T1021	-
48	ROAD CLOSURE - TUOLUMNE ST	CV-T1013 & CV-T1015	-



LOCATION NUMBER LEGEND

- # - INDICATES GRADE SEPARATION
- # - INDICATES LOCAL ROAD CLOSURE
- # - INDICATES LOCAL ROAD MODIFICATION

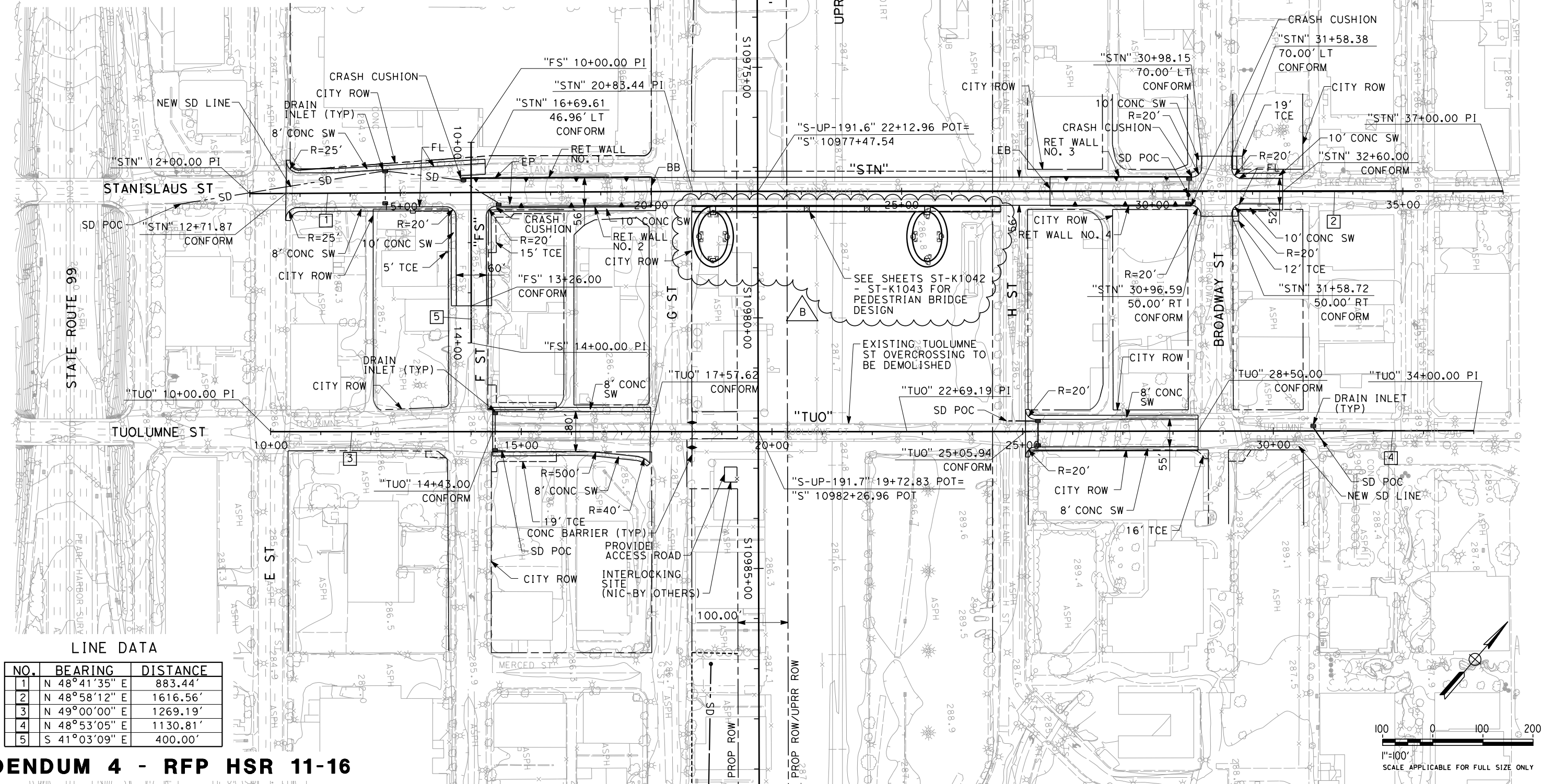
ADDENDUM 3 - RFP HSR 11-16

						DESIGNED BY I. JOSIFEK			<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT SIERRA SUBDIVISION</b> PACKAGE 1B ROADWAY INDEX MAP			CONTRACT NO.
					DRAWN BY V. ORTEGA	DRAWING NO. CV-B0007-A3						
					CHECKED BY B. RAWSON	SCALE NO SCALE						
					IN CHARGE O. EARLE	SHEET NO.						
					DATE 06/12/12							
A	2012-06	VO	BR	RP	REVISED FOR ADDENDUM 3							
REV	DATE	BY	CHK	APP	DESCRIPTION							





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NO.	LOCATIONS		LENGTH	AVG HEIGHT
	BEGIN	END		
1	28.00' LT "STN" 16+22.52	28.00' LT "STN" 20+01.08	379'	15'
2	28.00' RT "STN" 16+91.14	28.00' RT "STN" 20+01.08	310'	15'
3	28.00' LT "STN" 27+96.08	28.00' LT "STN" 30+78.65	283'	10'
4	28.00' RT "STN" 27+96.08	28.00' RT "STN" 30+77.33	281'	10'



NO.	BEARING	DISTANCE
1	N 48°41'35" E	883.44'
2	N 48°58'12" E	1616.56'
3	N 49°00'00" E	1269.19'
4	N 48°53'05" E	1130.81'
5	S 41°03'09" E	400.00'

ADDENDUM 4 - RFP HSR 11-16

						DESIGNED BY J. NETTLETON	<b>PROPOSED PRELIMINARY DESIGN</b>	 	<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT SIERRA SUBDIVISION</b> PACKAGE 1B ROADWAY GRADE SEPARATION LAYOUT STANISLAUS ST AND TUOLUMNE ST	CONTRACT NO.
						DRAWN BY V. ORTEGA				DRAWING NO. CV-T1013-B4
						CHECKED BY B. RAWSON				SCALE AS SHOWN
						IN CHARGE O. EARLE				SHEET NO.
REV	DATE	BY	CHK	APP	DESCRIPTION	DATE 07/13/12				
B	2012-07	IJ	BR	RP	REVISED FOR ADDENDUM 4					
A	2012-06	VO	BR	RP	REVISED FOR ADDENDUM 3					

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ADDENDUM 3 - RFP HSR 11-16

A	2012-06	VO	BR	RP	REVISED FOR ADDENDUM 3
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY J. NETTLETON
DRAWN BY V. ORTEGA
CHECKED BY B. RAWSON
IN CHARGE O. EARLE
DATE 06/12/12

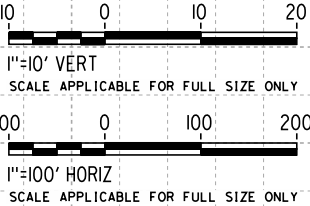
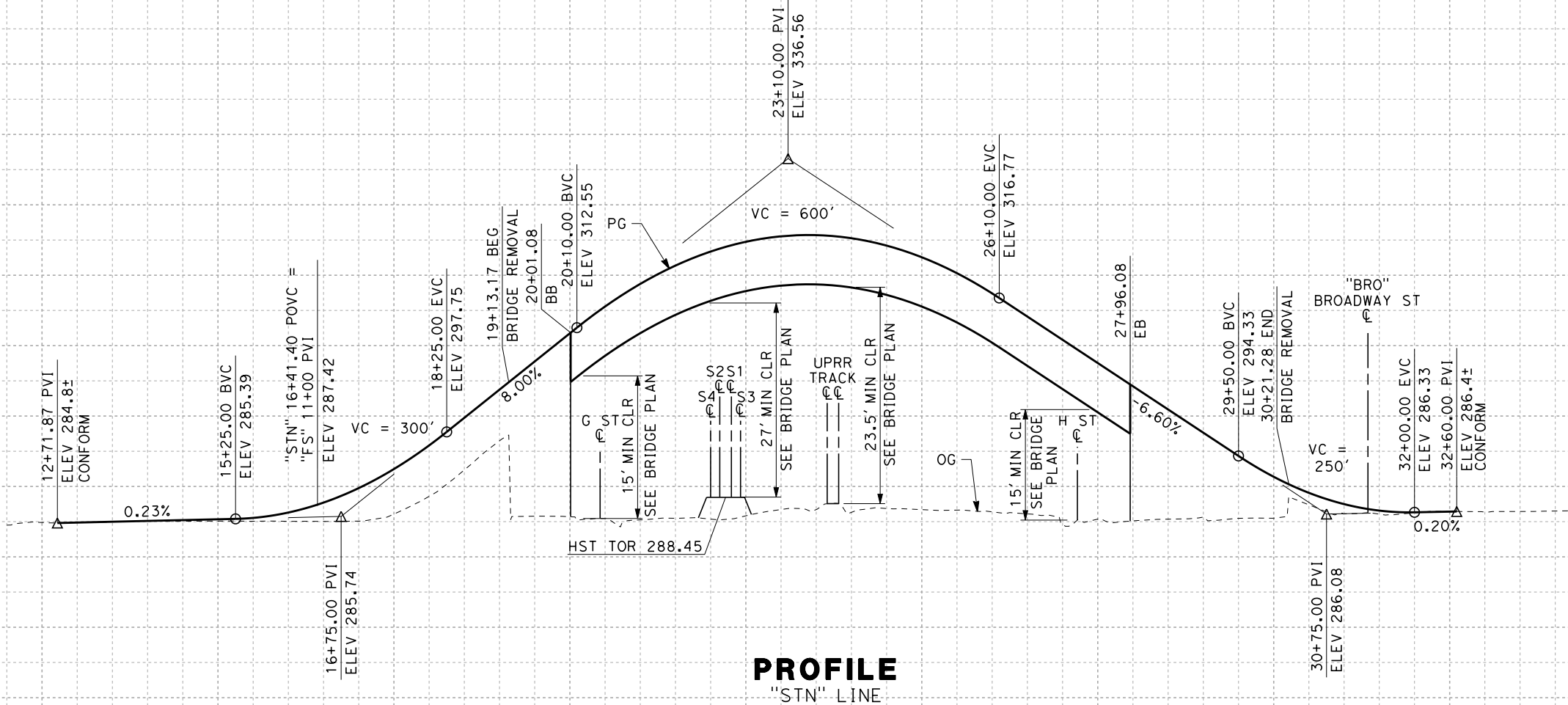
PROPOSED  
PRELIMINARY  
DESIGN

NOT FOR  
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
ROADWAY  
GRADE SEPARATION PROFILE  
STANISLAUS ST

CONTRACT NO.
DRAWING NO. CV-T1014-A3
SCALE AS SHOWN
SHEET NO.



NOTES:

1. FOR BRIDGE INFORMATION, SEE STRUCTURAL PLANS.

06/29/2012 ADDENDUM 3 - RFP HSR 11-16



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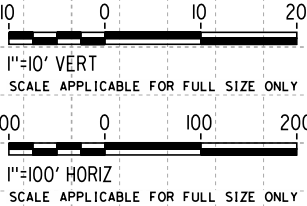
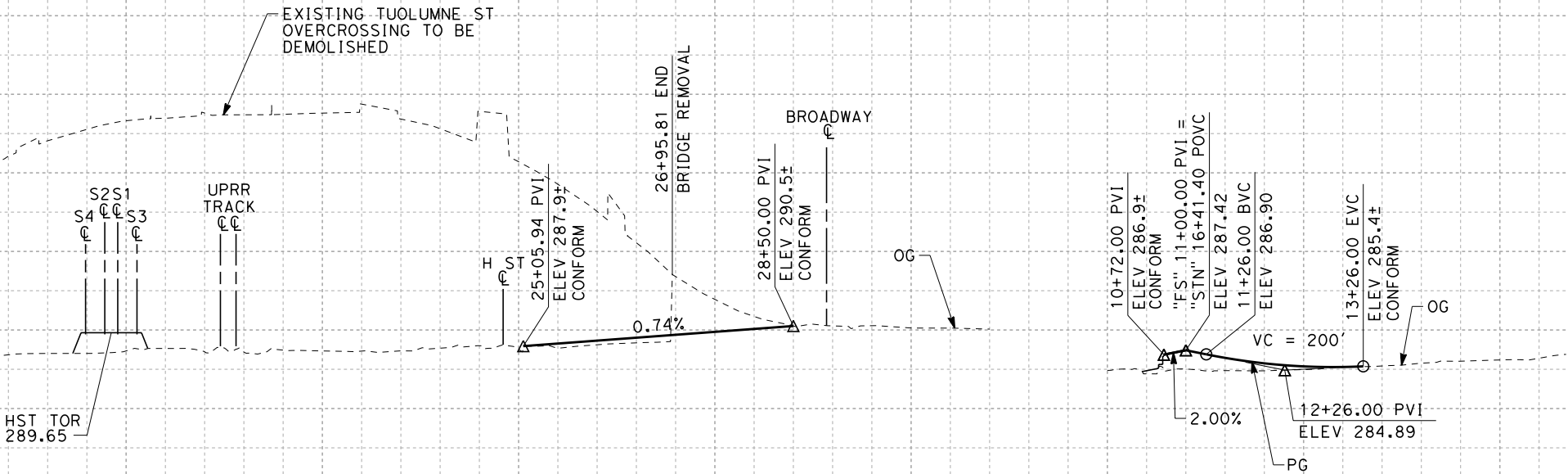
ADDENDUM 3 - RFP HSR 11-16

PROFILE  
"TUO" LINE

PROFILE  
"FS" LINE (STANISLAUS ST)

NOTES:

1. FOR BRIDGE INFORMATION, SEE STRUCTURAL PLANS.



A	2012-06	VO	BR	RP	REVISED FOR ADDENDUM 3
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY J. NETTLETON
DRAWN BY V. ORTEGA
CHECKED BY B. RAWSON
IN CHARGE O. EARLE
DATE 06/12/12

PROPOSED  
PRELIMINARY  
DESIGN  
  
NOT FOR  
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
ROADWAY  
GRADE SEPARATION PROFILE  
TUOLUMNE ST/F ST AT STANISLAUS ST

CONTRACT NO.
DRAWING NO. CV-T1015-A3
SCALE AS SHOWN
SHEET NO.



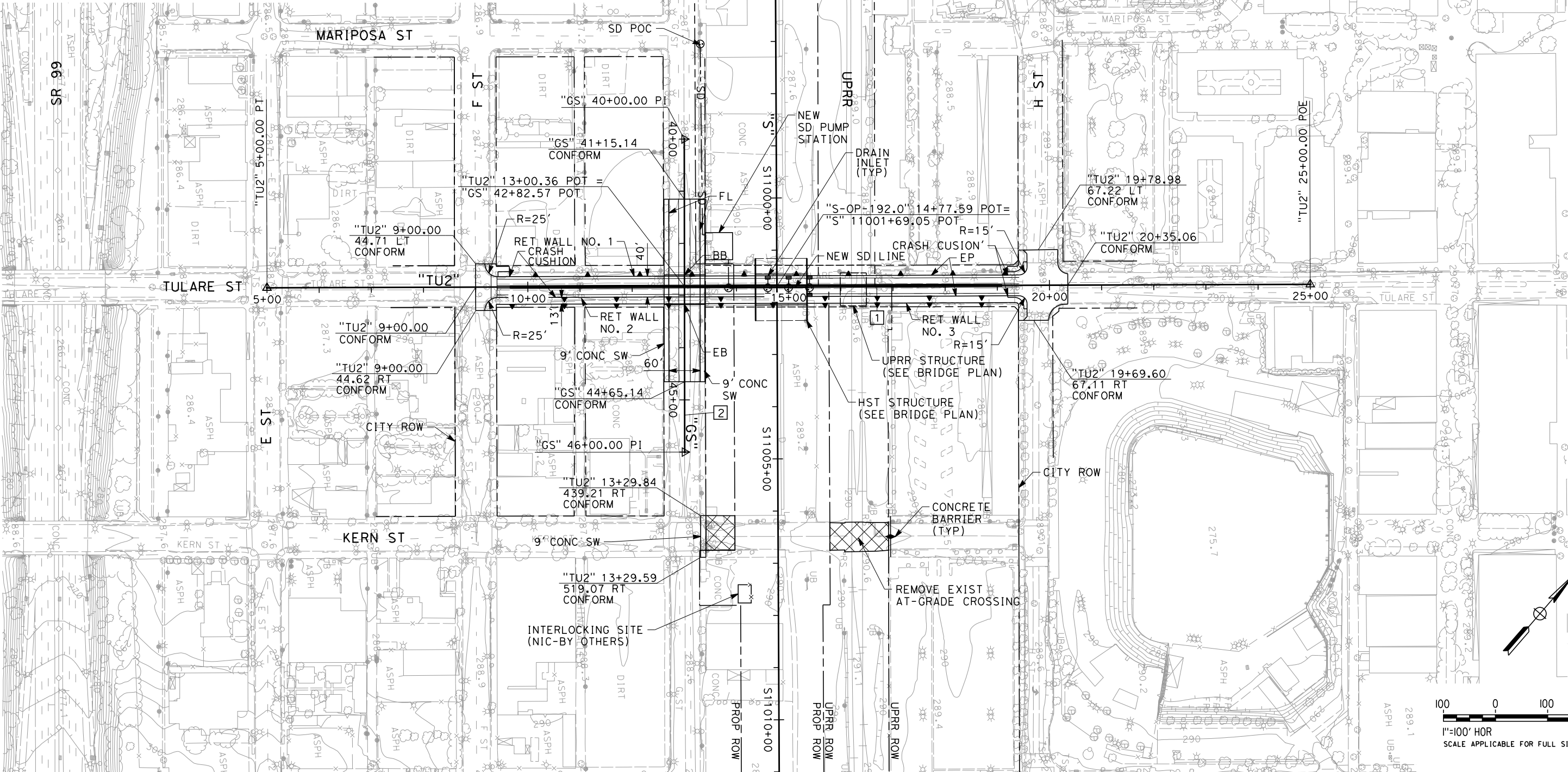
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LINE DATA

NO.	BEARING	DISTANCE
1	N 48°54'51" E	2000.00'
2	N 40°58'08" W	600.00'

RETAINING WALL DATA

NO.	LOCATIONS				LENGTH	AVG HEIGHT
	BEGIN		END			
1	20.00' LT "TU2"	9+64.86	20.00' LT "TU2"	19+20.00	955'	20'
2	20.00' RT "TU2"	10+53.00	20.00' RT "TU2"	19+20.00	867'	10'
3	33.00' RT "TU2"	9+64.86	33.00' RT "TU2"	19+20.00	955'	15'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY J. MONG
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BURGESS
IN CHARGE R. COFFIN
DATE 02/17/12

PROPOSED PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

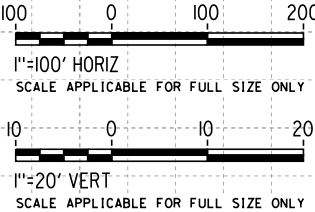
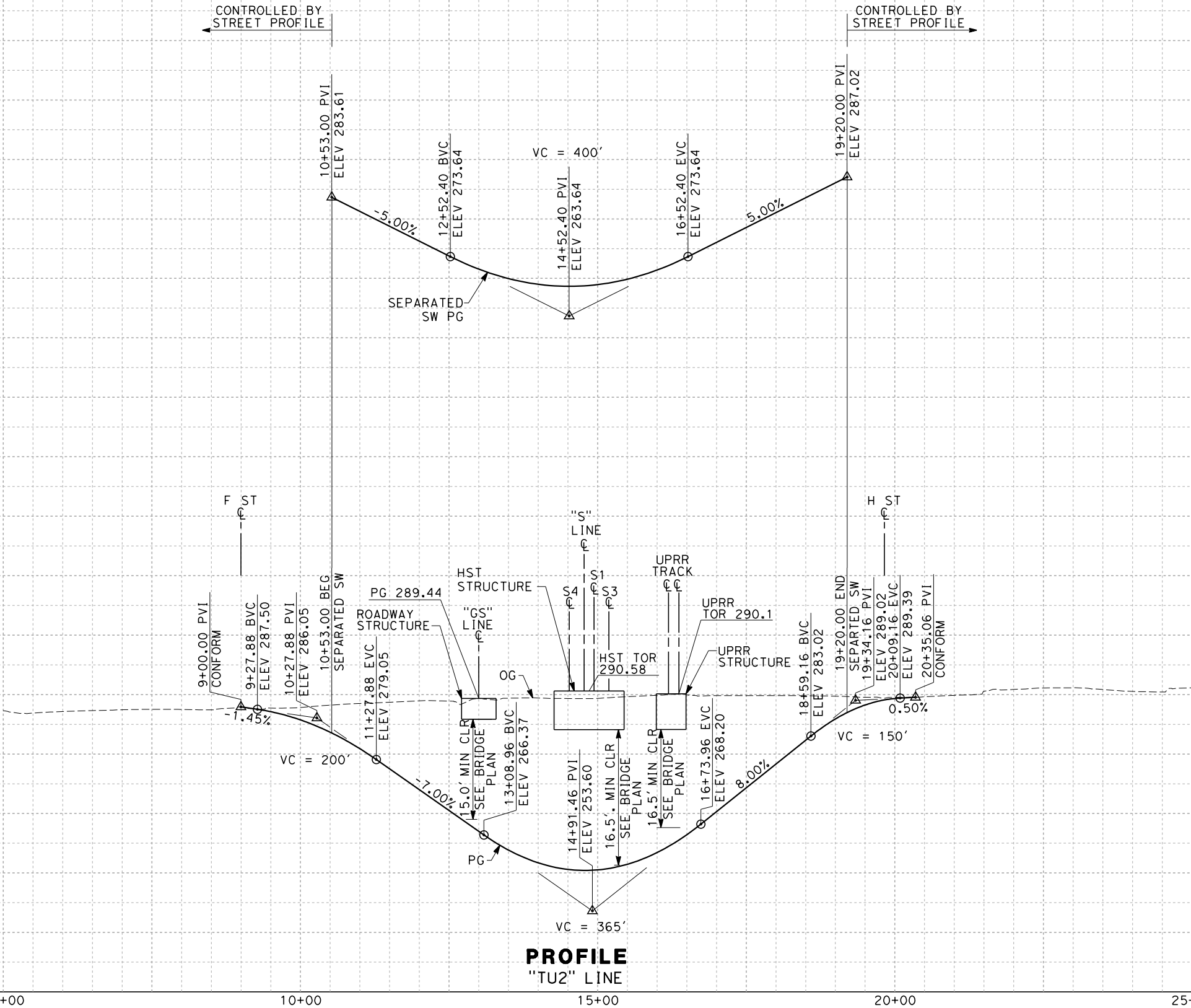


CALIFORNIA HIGH-SPEED TRAIN PROJECT SIERRA SUBDIVISION PACKAGE 1B ROADWAY GRADE SEPARATION LAYOUT TULARE STREET (HST OVERPASS)
---

CONTRACT NO.
DRAWING NO. CV-T1018
SCALE AS SHOWN
SHEET NO.

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NOTES:  
1. FOR BRIDGE INFORMATION, SEE STRUCTURAL PLANS.



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY J. MONG
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BURGESS
IN CHARGE R. COFFIN
DATE 02/17/12

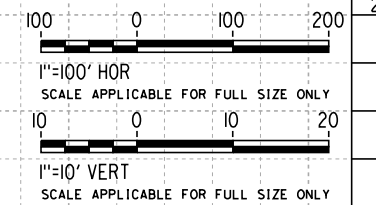
PROPOSED  
PRELIMINARY  
DESIGN  
  
NOT FOR  
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
ROADWAY  
GRADE SEPARATION PROFILE  
TULARE STREET (HST OVERPASS)

CONTRACT NO.
DRAWING NO. CV-T1019
SCALE AS SHOWN
SHEET NO.

1. FOR BRIDGE INFORMATION, SEE STRUCTURAL PLAN.



DESIGNED BY J. MONG
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BURGESS
IN CHARGE R. COFFIN
DATE 02/17/12

**PROPOSED  
PRELIMINARY  
DESIGN**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**SIERRA SUBDIVISION**  
PACKAGE 1B  
ROADWAY  
GRADE SEPARATION PROFILE  
G STREET

CONTRACT NO.
DRAWING NO. CV-T1020
SCALE AS SHOWN
SHEET NO.



NO.	R	$\Delta$	T	L
(1)	10000.00'	01°07'09"	97.66'	195.31'
(2)	10000.00'	01°07'47"	98.59'	197.17'

NO.	BEARING	DISTANCE
1	N 48°50'38" E	758.70'
2	N 49°10'54" E	636.86
3	N 50°18'02" E	182.61'
4	N 49°10'15" E	687.13'
5	S 40°49'08" E	960.01'
6	S 41°03'27" E	972.04'

NO.	LOCATIONS		LENGTH	AVG HEIGHT
	BEGIN	END		
1	30.00' LT "VEN" 9+45.96	34.50' LT "VEN" 12+55.00	309'	10'
2	31.00' RT "VEN" 9+45.96	34.50' RT "VEN" 12+55.00	309'	10'
3	38.00' LT "VEN" 20+55.00	38.00' LT "VEN" 23+23.73	269'	10'
4	41.00' RT "VEN" 20+55.00	37.50' RT "VEN" 23+23.73	269'	10'

**DELETED SHEET**

## ADDENDUM 6 - RFP HSR 11-16

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**SIERRA SUBDIVISION**  
 PACKAGE 1B  
 ROADWAY  
 GRADE SEPARATION LAYOUT  
 VENTURA ST

CONTRACT NO.
DRAWING NO. CV-T1021
SCALE AS SHOWN
SHEET NO.

**PROPOSED  
PRELIMINARY  
DESIGN**

**NOT FOR  
CONSTRUCTION**

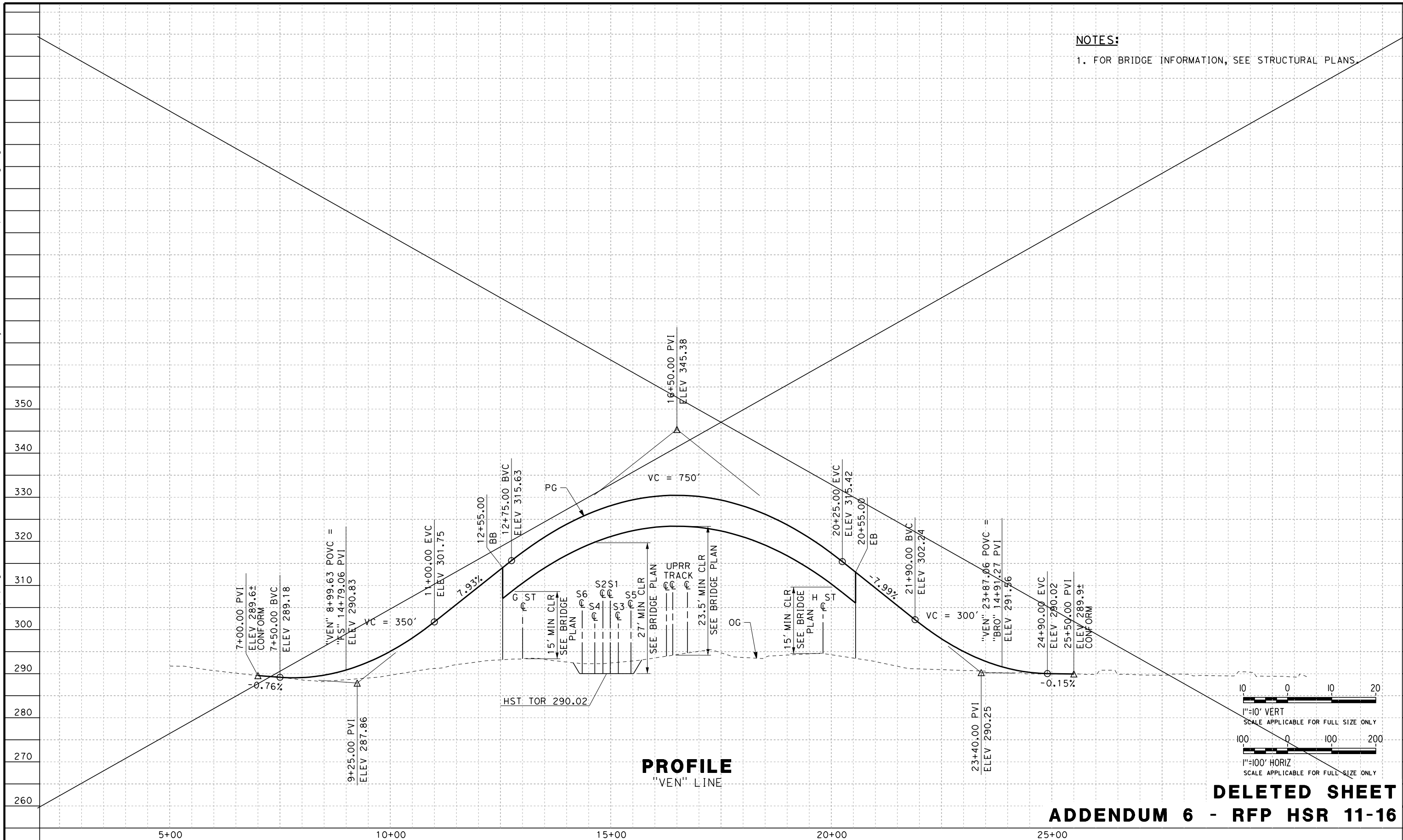


**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

DESIGNED BY	J. NETTLETON
DRAWN BY	V. ORTEGA
CHECKED BY	B. RAWSON
IN CHARGE	Q. EARLE
DATE	11/12/12

A	11/12/12	PAT	ES	RC	SHEET DELETED FROM RECORD SET
REV	DATE	BY	CHK	APP	DESCRIPTION

11/12/2012 12:53:52 PM CAHSR-r1.tbl PDF\_half\_black\_200dpi.plt Global\americas\Jobs\5-F\31000\131577\4 Internal Project Data\4-01 Record Copies of Outgoing Documents\2012\2012.11.09 CP1B Del Paul.Tonkin



A	11/12/12	PAT	ES	RC	
REV	DATE	BY	CHK	APP	DESCRIPTION
					SHEET DELETED FROM RECORD SET

DESIGNED BY J. NETTLETON
DRAWN BY V. ORTEGA
CHECKED BY B. RAWSON
IN CHARGE O. EARLE
DATE 11/12/12

PROPOSED PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

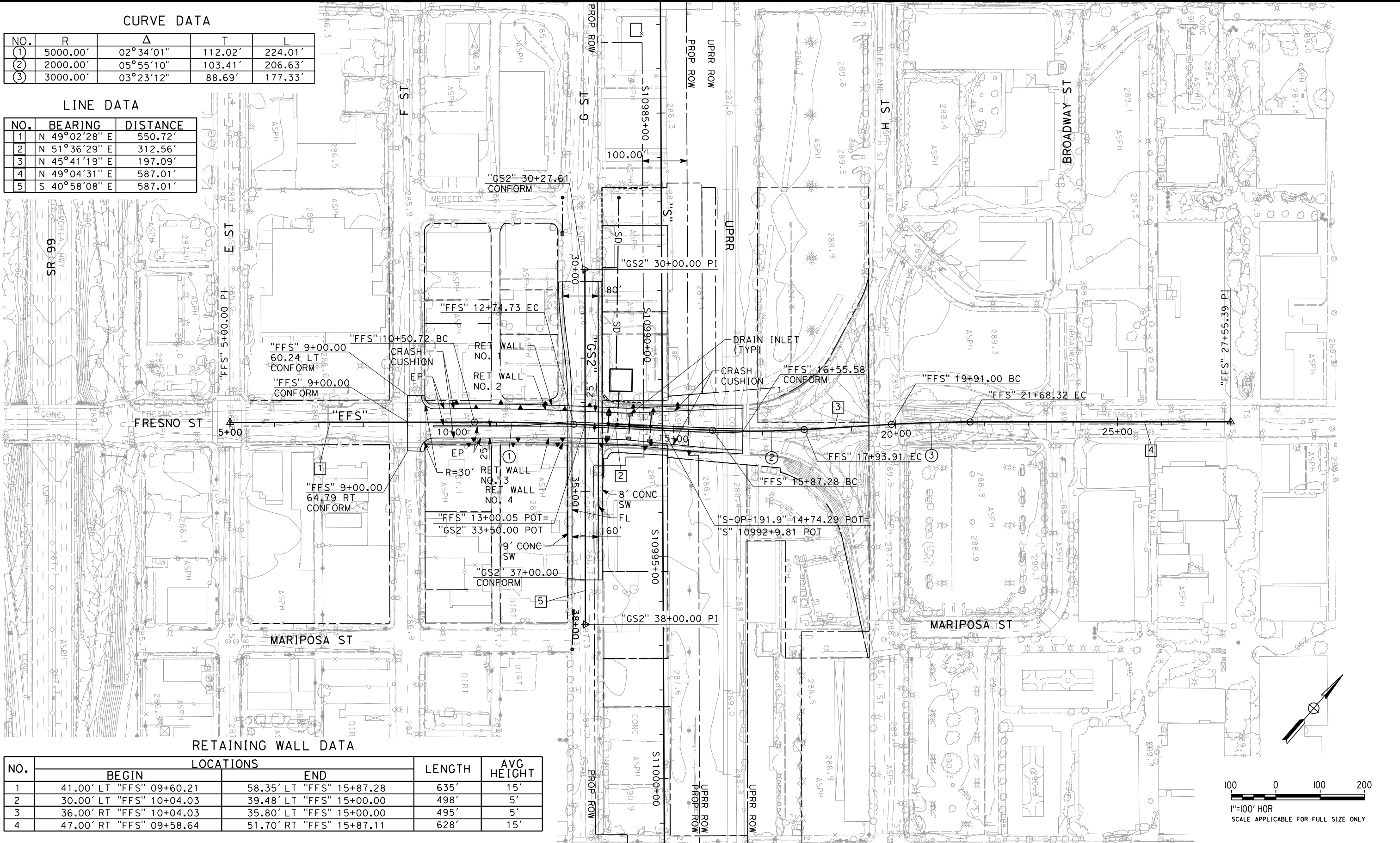


CALIFORNIA HIGH-SPEED TRAIN PROJECT SIERRA SUBDIVISION PACKAGE 1B ROADWAY GRADE SEPARATION PROFILE VENTURA ST
--

CONTRACT NO.
DRAWING NO. CV-T1022
SCALE AS SHOWN
SHEET NO.

NO.	R	$\Delta$	T	L
(1)	5000.00'	02°34'01"	112.02'	224.01'
(2)	2000.00'	05°55'10"	103.41'	206.63'
(3)	3000.00'	03°23'12"	88.69'	177.33'

NO.	BEARING	DISTANCE
1	N 49°02'28" E	550.72'
2	N 51°36'29" E	312.56'
3	N 45°41'19" E	197.09'
4	N 49°04'31" E	587.01'
5	S 40°58'08" E	587.01'



NO.	LOCATIONS		LENGTH	AVG HEIGHT
	BEGIN	END		
1	41.00' LT "FFS" 09+60.21	58.35' LT "FFS" 15+87.28	635'	15'
2	30.00' LT "FFS" 10+04.03	39.48' LT "FFS" 15+00.00	498'	5'
3	36.00' RT "FFS" 10+04.03	35.80' LT "FFS" 15+00.00	495'	5'
4	47.00' RT "FFS" 09+58.64	51.70' RT "FFS" 15+87.11	628'	15'

REV					
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY J. MONG
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BURGESS
IN CHARGE R. COFFIN
DATE 02/17/12

**PROPOSED  
PRELIMINARY  
DESIGN**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**SIERRA SUBDIVISION**  
PACKAGE 1B  
ROADWAY  
GRADE SEPARATION LAYOUT  
FRESNO STREET (HST OVERPASS)

CONTRACT NO.

---

DRAWING NO.

CV-T1024

---

SCALE

AS SHOWN

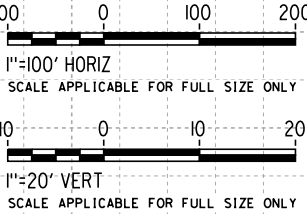
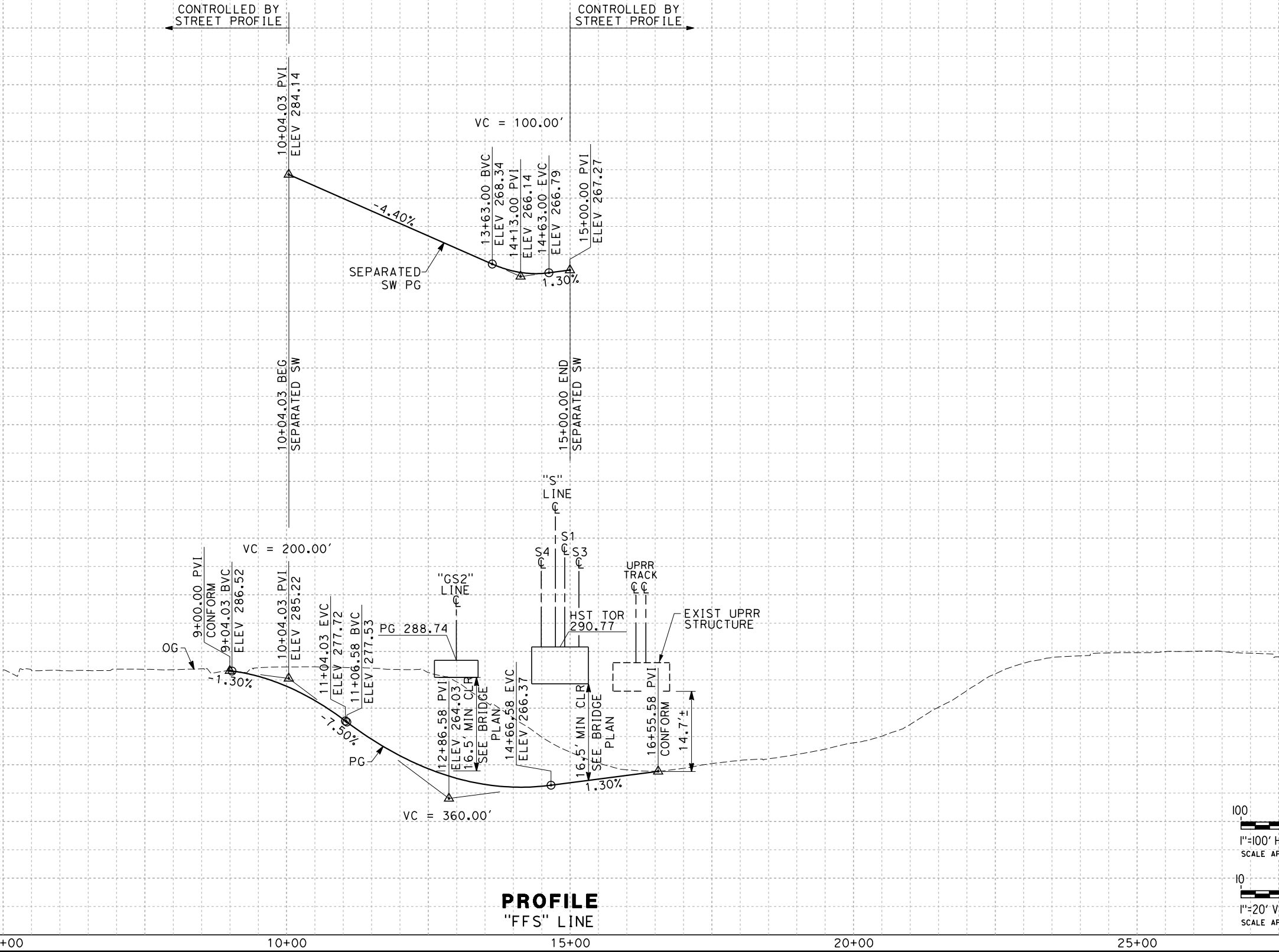
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SHEET NO.



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NOTES:  
1. FOR BRIDGE INFORMATION, SEE STRUCTURAL PLANS.



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY J. MONG
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BURGESS
IN CHARGE R. COFFIN
DATE 02/17/12

PROPOSED  
PRELIMINARY  
DESIGN

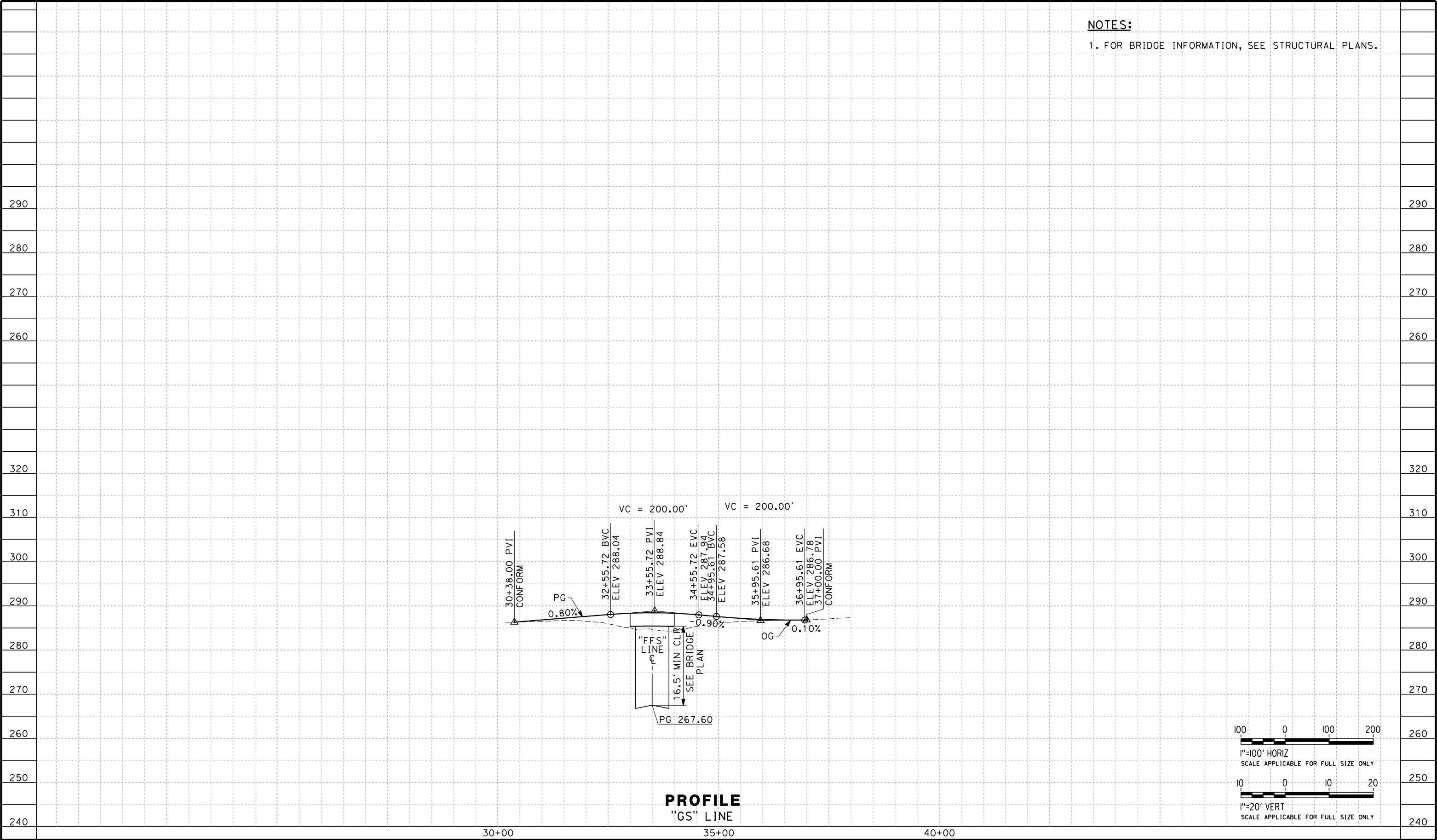
NOT FOR  
CONSTRUCTION





CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
ROADWAY  
GRADE SEPARATION PROFILE  
FRESNO STREET (HST OVERPASS)

CONTRACT NO.
DRAWING NO. CV-T1025
SCALE AS SHOWN
SHEET NO.

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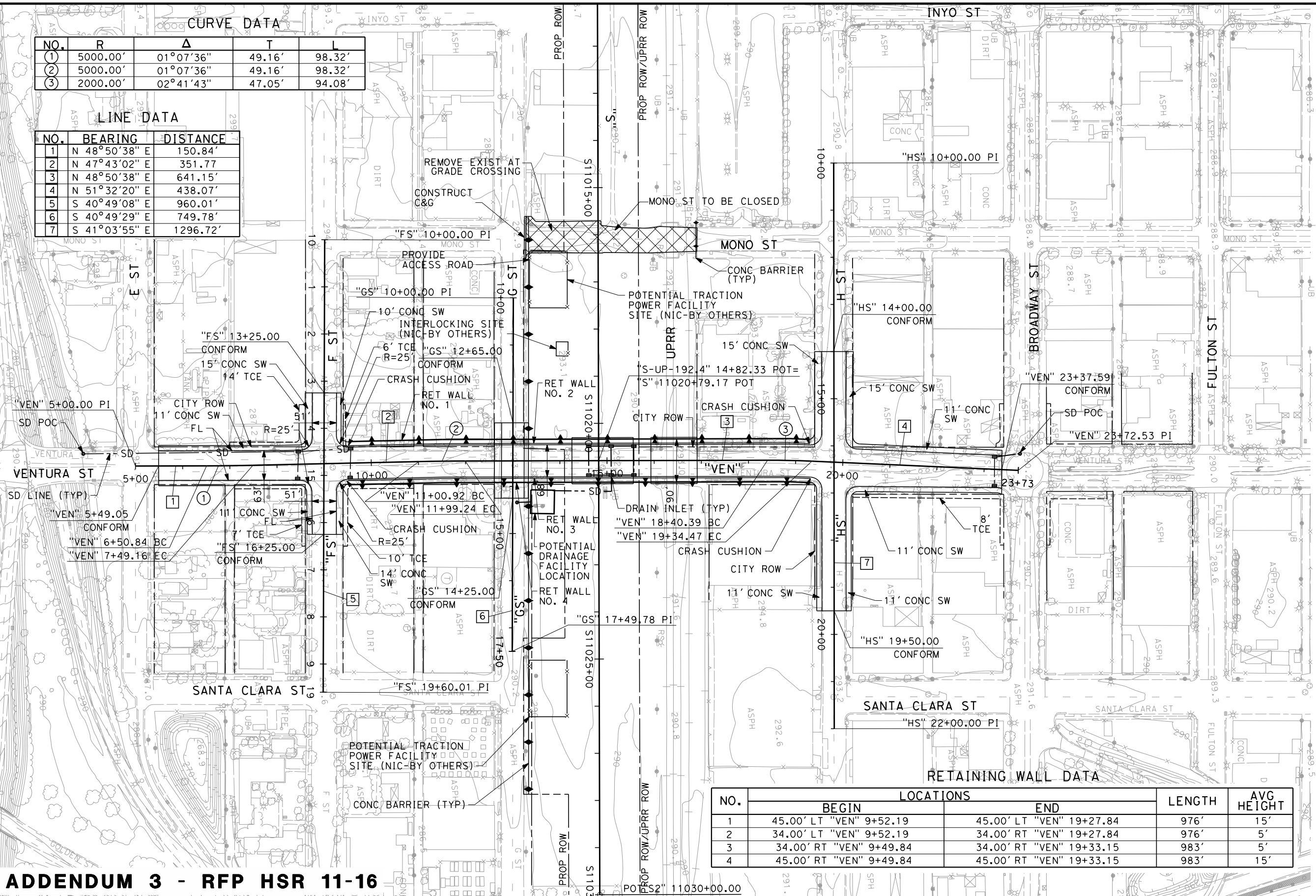
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					DRAWING NO. CV-T1026							
					SCALE AS SHOWN							
					SHEET NO.							
REV	DATE	BY	CHK	APP	DESCRIPTION	DATE 02/17/12						



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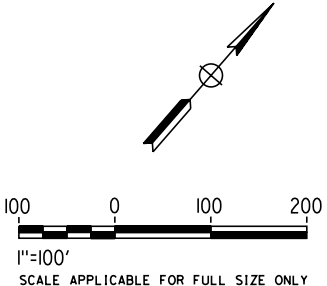
NO.	R	Δ	T	L
①	5000.00'	01°07'36"	49.16'	98.32'
②	5000.00'	01°07'36"	49.16'	98.32'
③	2000.00'	02°41'43"	47.05'	94.08'

NO.	BEARING	DISTANCE
1	N 48°50'38" E	150.84'
2	N 47°43'02" E	351.77'
3	N 48°50'38" E	641.15'
4	N 51°32'20" E	438.07'
5	S 40°49'08" E	960.01'
6	S 40°49'29" E	749.78'
7	S 41°03'55" E	1296.72'



ADDENDUM 3 - RFP HSR 11-16

NO.	LOCATIONS		LENGTH	AVG HEIGHT
	BEGIN	END		
1	45.00' LT "VEN" 9+52.19	45.00' LT "VEN" 19+27.84	976'	15'
2	34.00' LT "VEN" 9+52.19	34.00' RT "VEN" 19+27.84	976'	5'
3	34.00' RT "VEN" 9+49.84	34.00' RT "VEN" 19+33.15	983'	5'
4	45.00' RT "VEN" 9+49.84	45.00' RT "VEN" 19+33.15	983'	15'



A	2012-06	VO	BR	RP	REVISED FOR ADDENDUM 3
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY J. NETTLETON
DRAWN BY V. ORTEGA
CHECKED BY B. RAWSON
IN CHARGE O. EARLE
DATE 06/12/12

PROPOSED PRELIMINARY DESIGN
NOT FOR CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT SIERRA SUBDIVISION PACKAGE 1B ROADWAY GRADE SEPARATION LAYOUT VENTURA ST
---

CONTRACT NO.
DRAWING NO. CV-T1027-A3
SCALE AS SHOWN
SHEET NO.

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ADDENDUM 3 - RFP HSR 11-16

A	2012-06	VO	BR	RP	REVISED FOR ADDENDUM 3
REV	DATE	BY	CHK	APP	DESCRIPTION

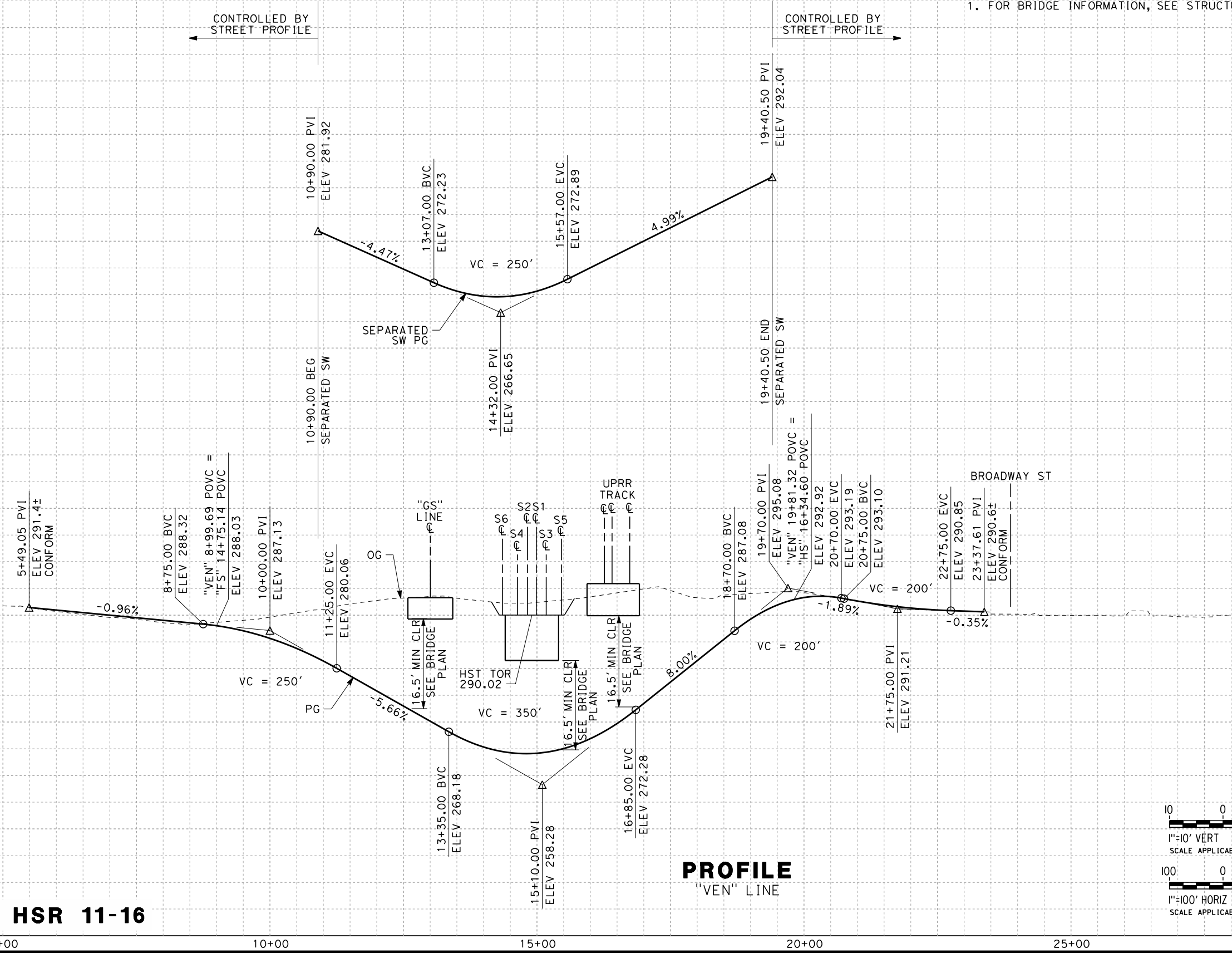
DESIGNED BY J. NETTLETON
DRAWN BY V. ORTEGA
CHECKED BY B. RAWSON
IN CHARGE O. EARLE
DATE 06/12/12

PROPOSED  
PRELIMINARY  
DESIGN  
  
NOT FOR  
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
ROADWAY  
GRADE SEPARATION PROFILE  
VENTURA ST

CONTRACT NO.
DRAWING NO. CV-T1028-A3
SCALE AS SHOWN
SHEET NO.

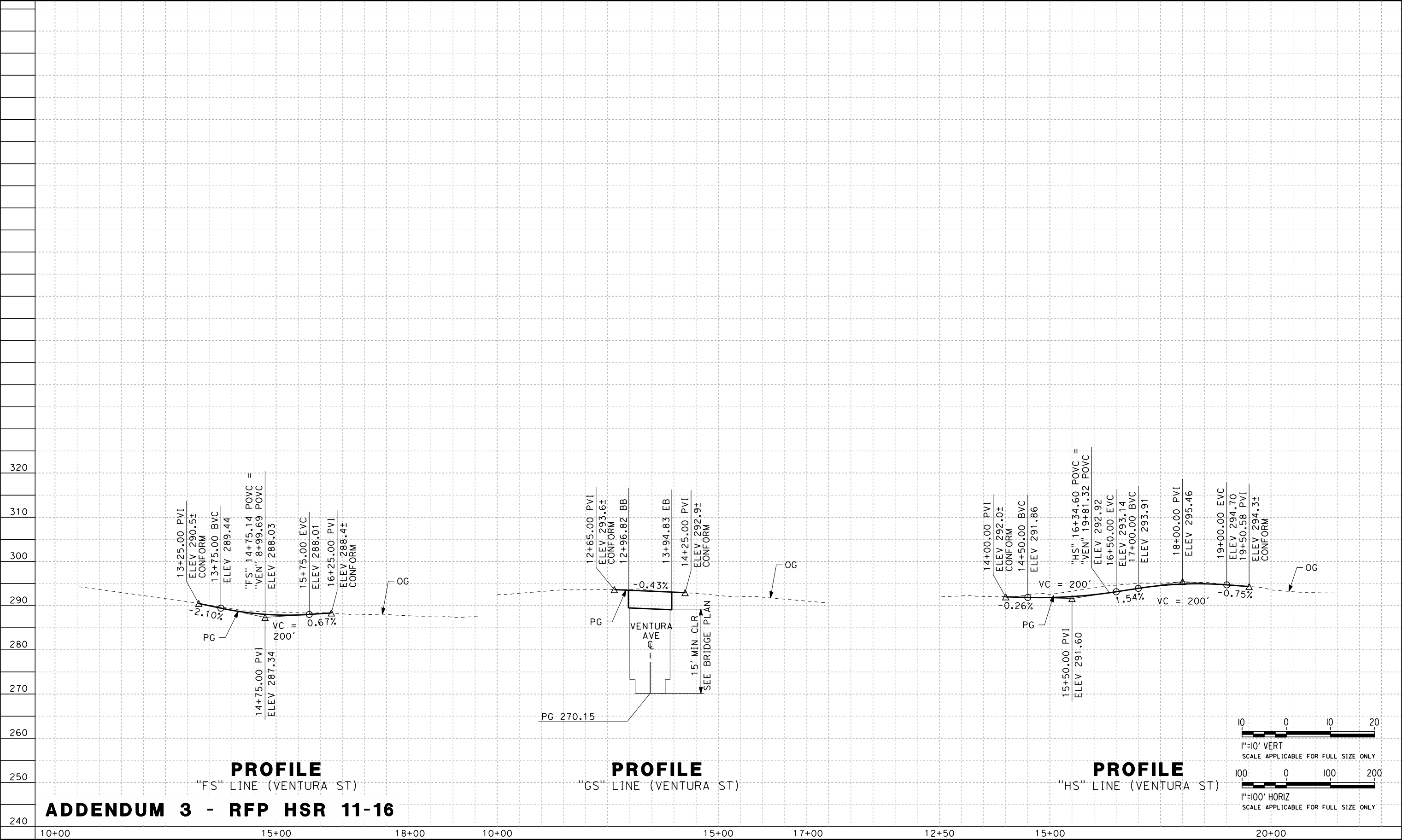


NOTES:  
1. FOR BRIDGE INFORMATION, SEE STRUCTURAL PLANS.

06/29/2012 ADDENDUM 3 - RFP HSR 11-16



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**PROFILE**  
"FS" LINE (VENTURA ST)

**ADDENDUM 3 - RFP HSR 11-16**

**PROFILE**  
"GS" LINE (VENTURA ST)

**PROFILE**  
"HS" LINE (VENTURA ST)

A	2012-06	VO	BR	RP	
REVISED FOR ADDENDUM 3					
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY J. NETTLETON
DRAWN BY V. ORTEGA
CHECKED BY B. RAWSON
IN CHARGE O. EARLE
DATE 06/12/12

**PROPOSED  
PRELIMINARY  
DESIGN**

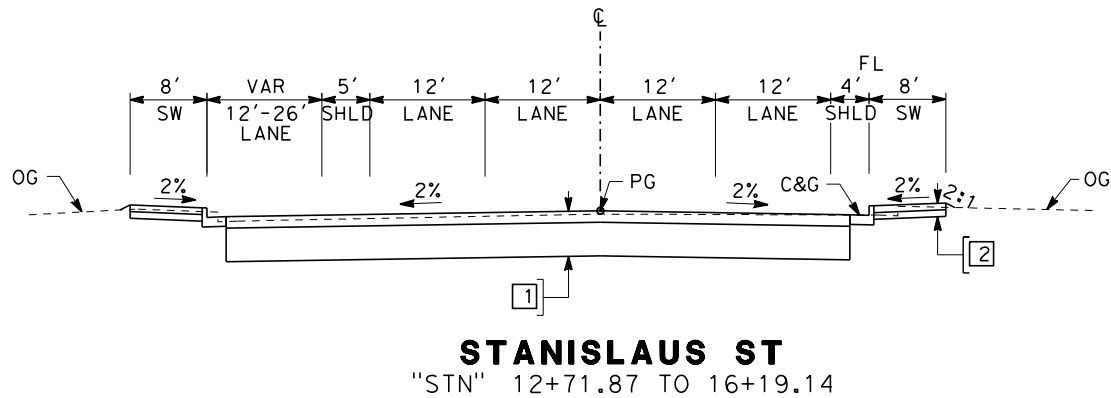
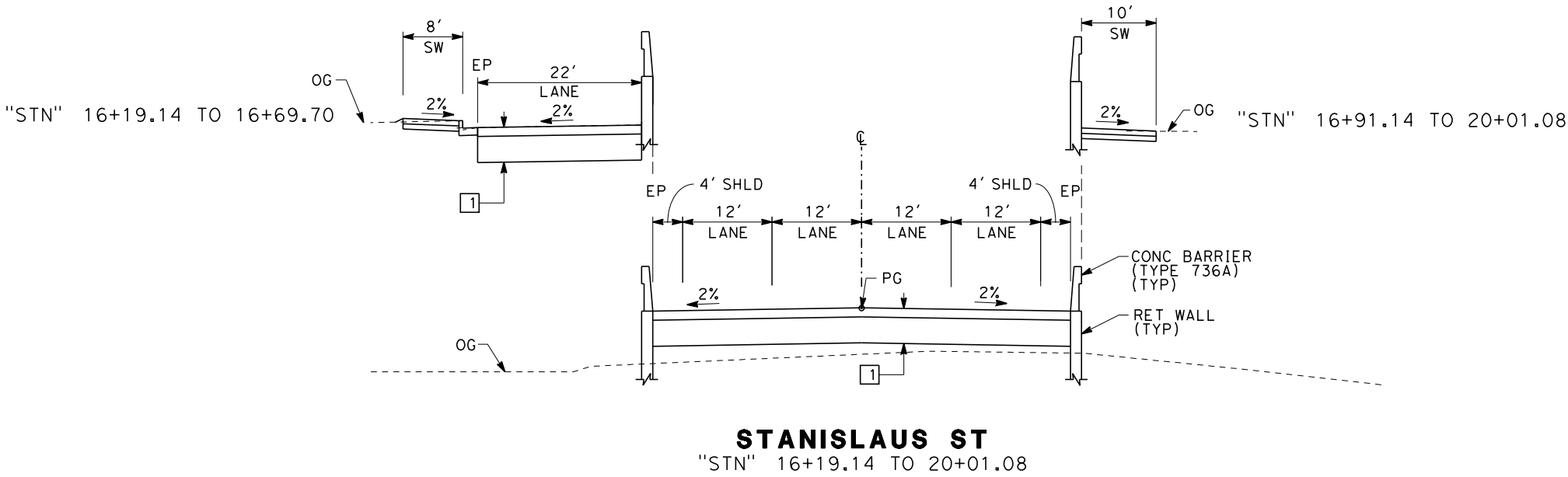
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION**  
PACKAGE 1B  
ROADWAY  
GRADE SEPARATION PROFILE  
F ST/G ST/H ST

CONTRACT NO.
DRAWING NO. CV-T1029-A3
SCALE AS SHOWN
SHEET NO.

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**NOTES:**

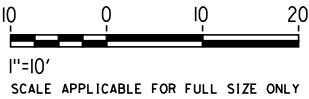
1. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
2. PAVEMENT SECTIONS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

**DESIGN SPEED TABLE**

STREET NAME	ALIGNMENT DESIGNATION	DESIGN SPEED (MPH)
STANISLAUS ST	STN	30
TUOLUMNE ST	TU0	30
TULARE ST (HST UNDERPASS)	TU1	30
TULARE ST (HST OVERPASS)	TU2	25
VENTURA ST	VEN	25
F ST (STANISLAUS ST)	FS	30
F ST (VENTURA ST)	FS	35
G ST (VENTURA ST)	GS	40
H ST (VENTURA ST)	HS	35
FRESNO ST (HST OVERPASS)	FFS	35
G ST (FRESNO ST)	GS2	40

**STRUCTURAL SECTIONS**  
**TYPICAL ROADWAY**

- 1 0.50' HMA (TYPE A)  
1.50' CL2 AB
- 2 0.35' PCC  
0.35' CL2 AB



**ADDENDUM 3 - RFP HSR 11-16**

REV	DATE	BY	CHK	APP	DESCRIPTION
A	2012-06	VO	BR	RP	REVISED FOR ADDENDUM 3

DESIGNED BY J. NETTLETON
DRAWN BY V. ORTEGA
CHECKED BY B. RAWSON
IN CHARGE O. EARLE
DATE 06/12/12

**PROPOSED  
PRELIMINARY  
DESIGN**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**SIERRA SUBDIVISION**  
PACKAGE 1B  
ROADWAY  
ROADWAY / GRADE SEPARATION  
TYPICAL SECTIONS

CONTRACT NO.
DRAWING NO. CV-T3007-A3
SCALE AS SHOWN
SHEET NO.



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ADDENDUM 3 - RFP HSR 11-16

A	2012-06	VO	BR	RP	REVISED FOR ADDENDUM 3
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY J. NETTLETON
DRAWN BY V. ORTEGA
CHECKED BY B. RAWSON
IN CHARGE O. EARLE
DATE 06/12/12

PROPOSED  
PRELIMINARY  
DESIGN

NOT FOR  
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
ROADWAY  
ROADWAY / GRADE SEPARATION  
TYPICAL SECTIONS

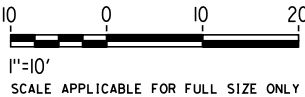
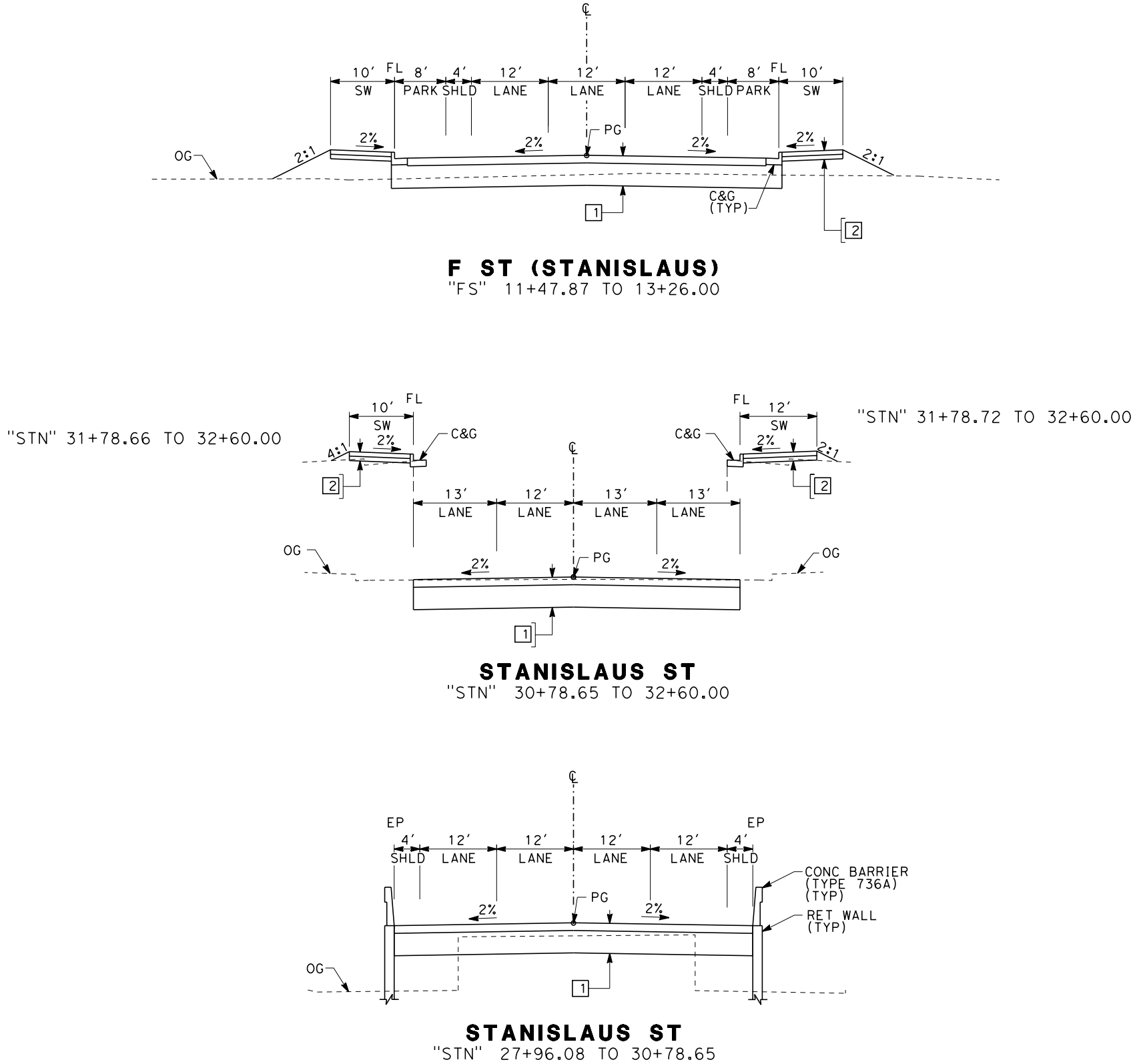
CONTRACT NO.
DRAWING NO. CV-T3008-A3
SCALE AS SHOWN
SHEET NO.

STRUCTURAL SECTIONS  
TYPICAL ROADWAY

- 1

0.50' HMA (TYPE A)  
1.50' CL2 AB
- 2

0.35' PCC  
0.35' CL2 AB



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ADDENDUM 3 - RFP HSR 11-16

A	2012-06	VO	BR	RP	REVISED FOR ADDENDUM 3
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY J. NETTLETON
DRAWN BY V. ORTEGA
CHECKED BY B. RAWSON
IN CHARGE O. EARLE
DATE 06/12/12

PROPOSED  
PRELIMINARY  
DESIGN

NOT FOR  
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
ROADWAY  
ROADWAY / GRADE SEPARATION  
TYPICAL SECTIONS

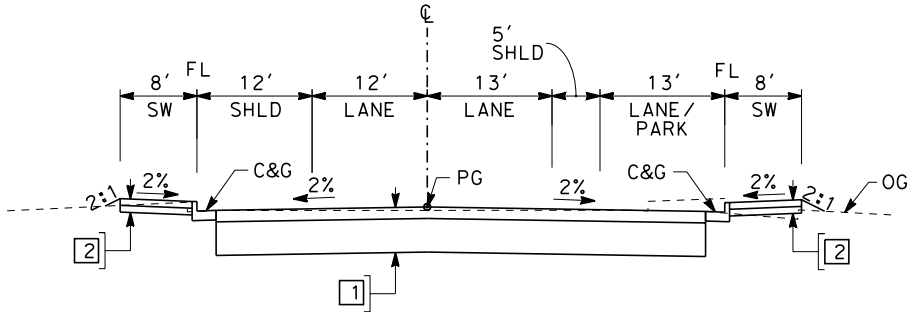
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DRAWING NO. CV-T3009-A3
SCALE AS SHOWN
SHEET NO.

STRUCTURAL SECTIONS  
TYPICAL ROADWAY

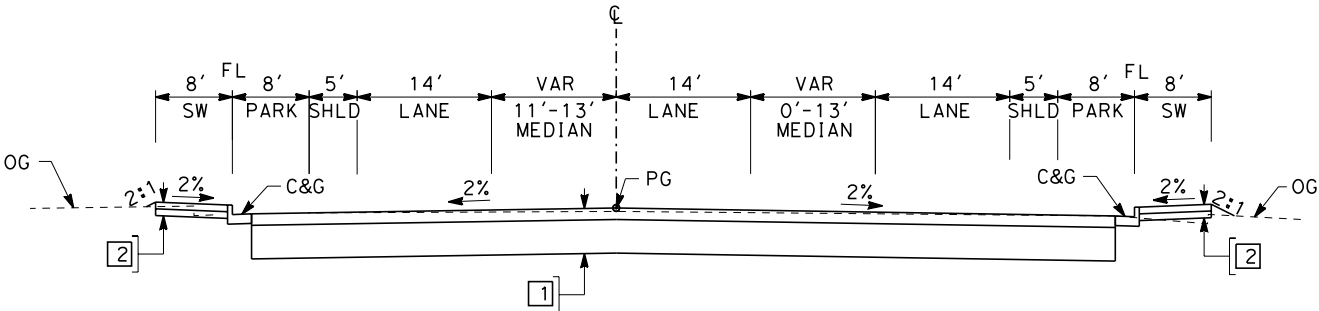
- 1

0.50' HMA (TYPE A)  
1.50' CL2 AB
- 2

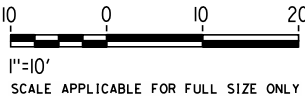
0.35' PCC  
0.35' CL2 AB



TUOLUMNE ST  
"TUO" 25+05.94 TO 28+50.00



TUOLUMNE ST  
"TUO" 14+43.00 TO 17+57.62



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ADDENDUM 3 - RFP HSR 11-16

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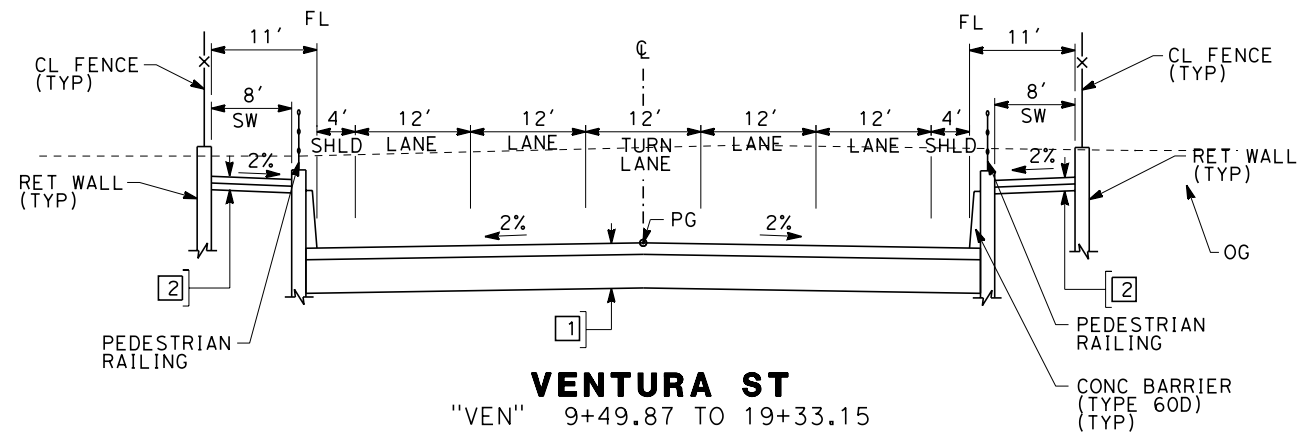
DESIGNED BY J. NETTLETON
DRAWN BY V. ORTEGA
CHECKED BY B. RAWSON
IN CHARGE O. EARLE
DATE 06/12/12

PROPOSED PRELIMINARY DESIGN
NOT FOR CONSTRUCTION



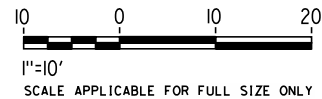
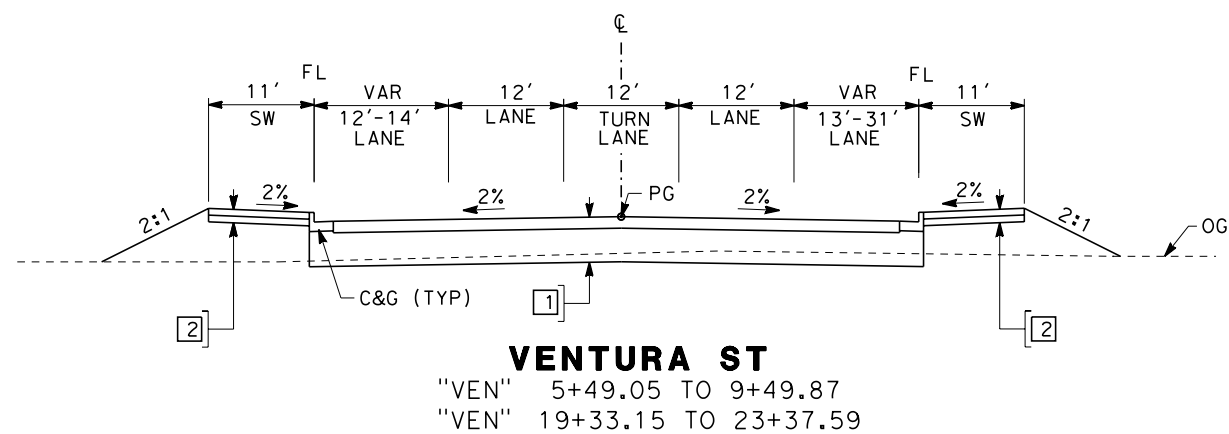
CALIFORNIA HIGH-SPEED TRAIN PROJECT SIERRA SUBDIVISION PACKAGE 1B ROADWAY ROADWAY / GRADE SEPARATION TYPICAL SECTIONS
--

CONTRACT NO.
DRAWING NO. CV-T3010-A3
SCALE AS SHOWN
SHEET NO.



STRUCTURAL SECTIONS  
TYPICAL ROADWAY

- 1 0.50' HMA (TYPE A)  
1.50' CL2 AB
- 2 0.35' PCC  
0.35' CL2 AB





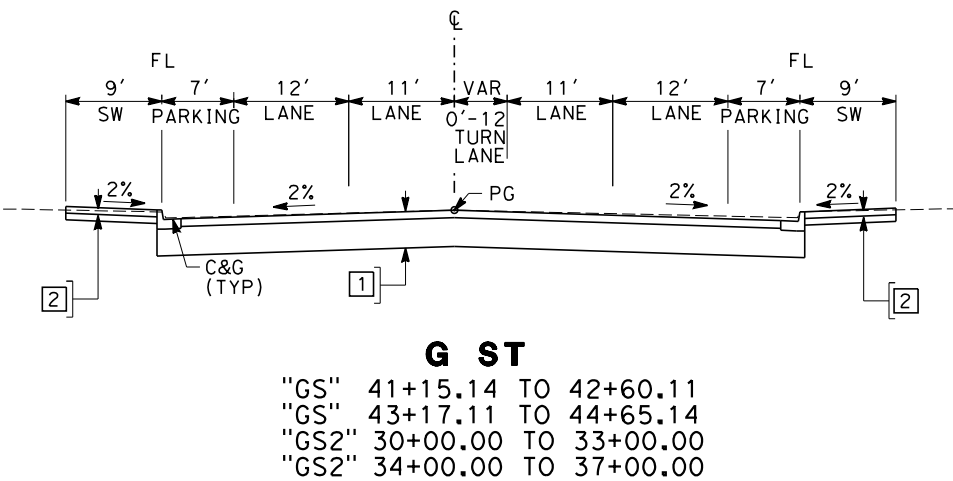
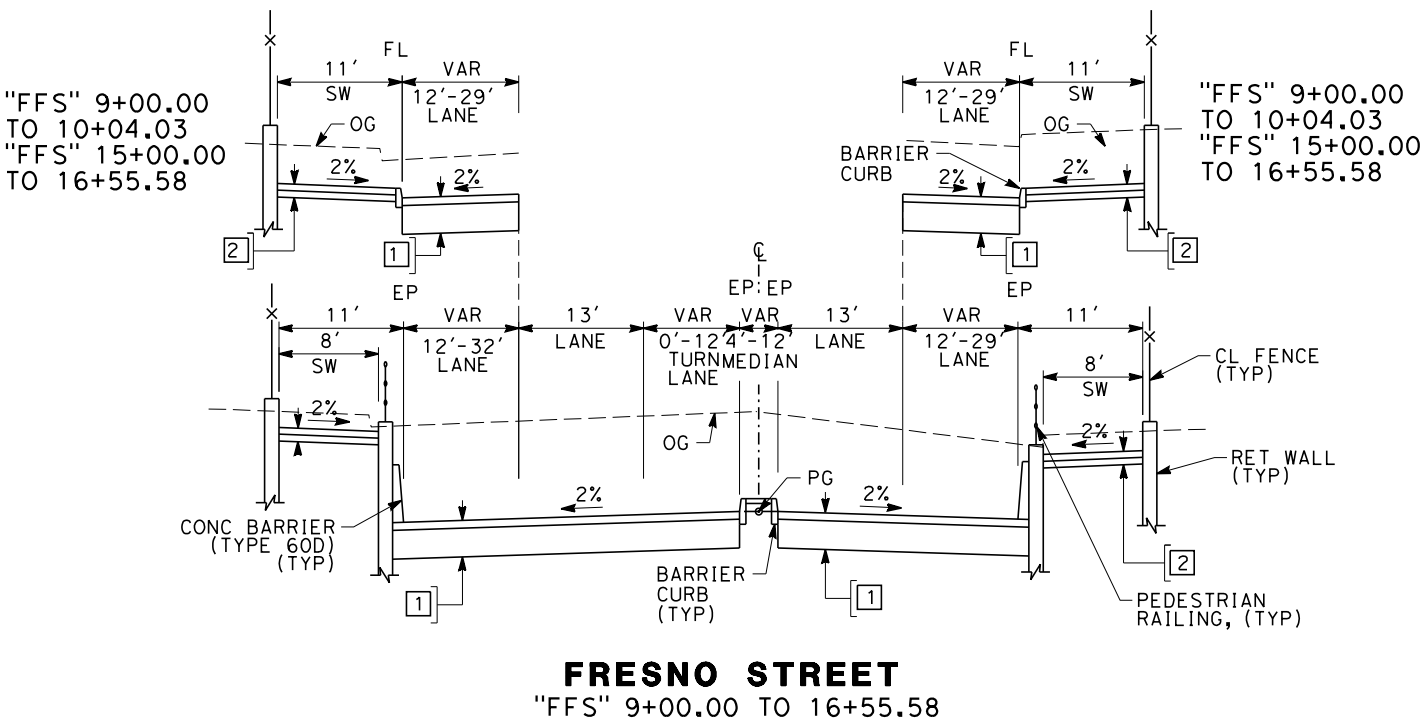
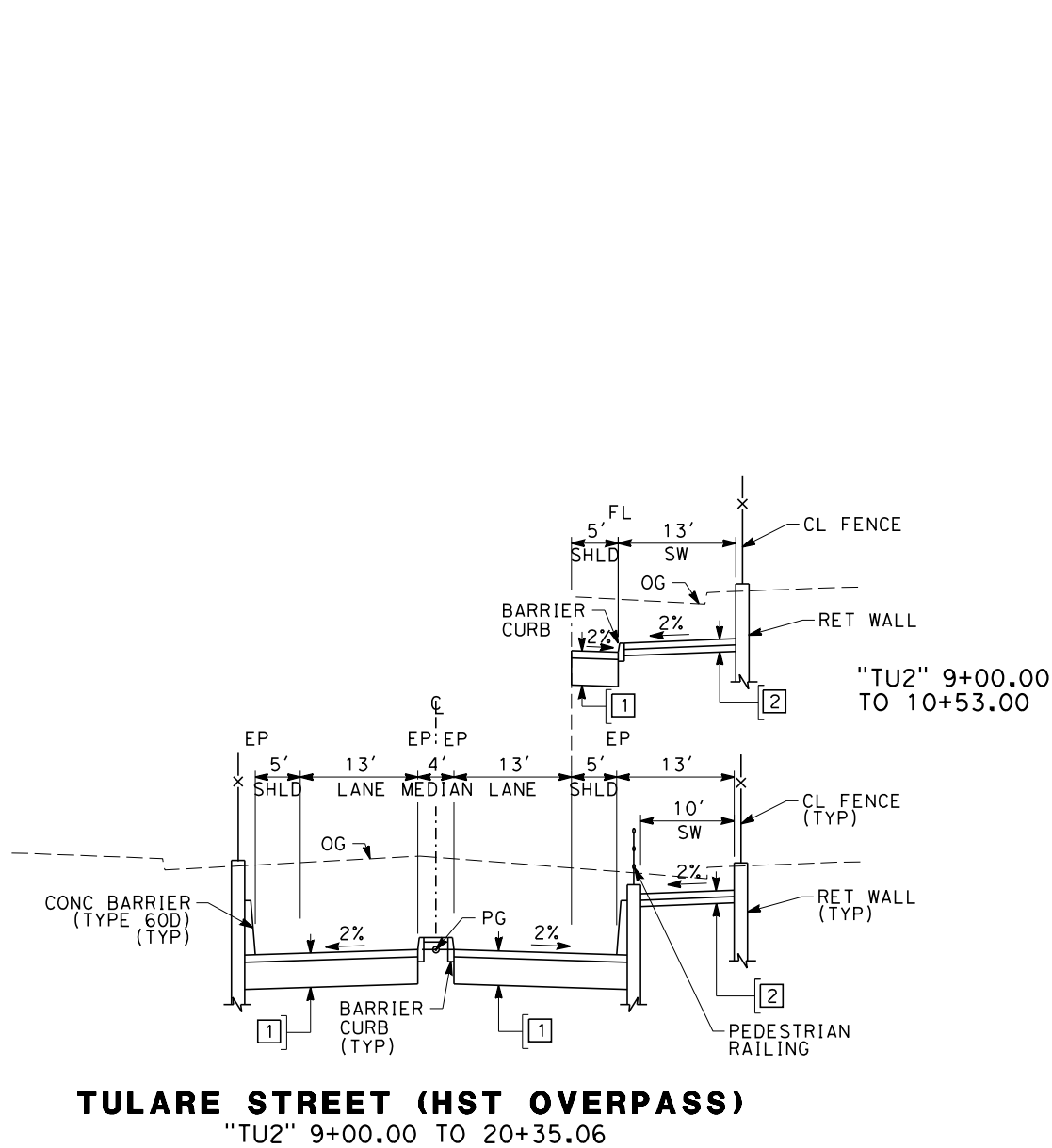
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STRUCTURAL SECTION  
TYPICAL ROADWAY

- 1

0.50' HMA (TYPE A)  
1.50' CL2 AB
- 2

0.35' PCC  
0.35' CL2 AB



ADDENDUM 3 - RFP HSR 11-16

REV	DATE	BY	CHK	APP	DESCRIPTION
A	2012-06	ES	MB	RP	REVISED FOR ADDENDUM 3

DESIGNED BY J. MONG
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BURGESS
IN CHARGE R. COFFIN
DATE 06/12/12

PROPOSED  
PRELIMINARY  
DESIGN  
  
NOT FOR  
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
ROADWAY  
ROADWAY / GRADE SEPARATION  
TYPICAL SECTION

CONTRACT NO.
DRAWING NO. CV-T3011-A3
SCALE AS SHOWN
SHEET NO.

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ADDENDUM 3 - RFP HSR 11-16

A	2012-06	VO	BR	RP	REVISED FOR ADDENDUM 3
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY J. NETTLETON
DRAWN BY V. ORTEGA
CHECKED BY B. RAWSON
IN CHARGE O. EARLE
DATE 06/12/12

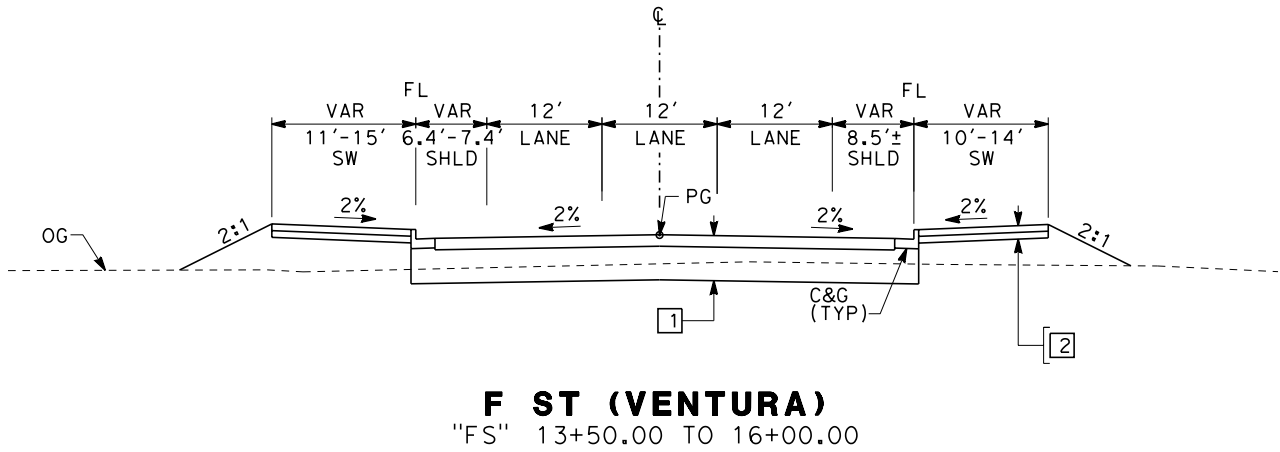
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DESIGN

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CONSTRUCTION

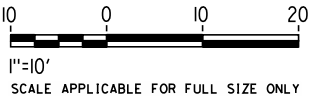


CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
ROADWAY  
ROADWAY / GRADE SEPARATION  
TYPICAL SECTIONS

CONTRACT NO.
DRAWING NO. CV-T3012-A3
SCALE AS SHOWN
SHEET NO.



STRUCTURAL SECTIONS	
TYPICAL ROADWAY	
1	0.50' HMA (TYPE A) 1.50' CL2 AB
2	0.35' PCC 0.35' CL2 AB



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ADDENDUM 3 - RFP HSR 11-16

A	2012-06	VO	BR	RP	REVISED FOR ADDENDUM 3
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY J. NETTLETON
DRAWN BY V. ORTEGA
CHECKED BY B. RAWSON
IN CHARGE O. EARLE
DATE 06/12/12

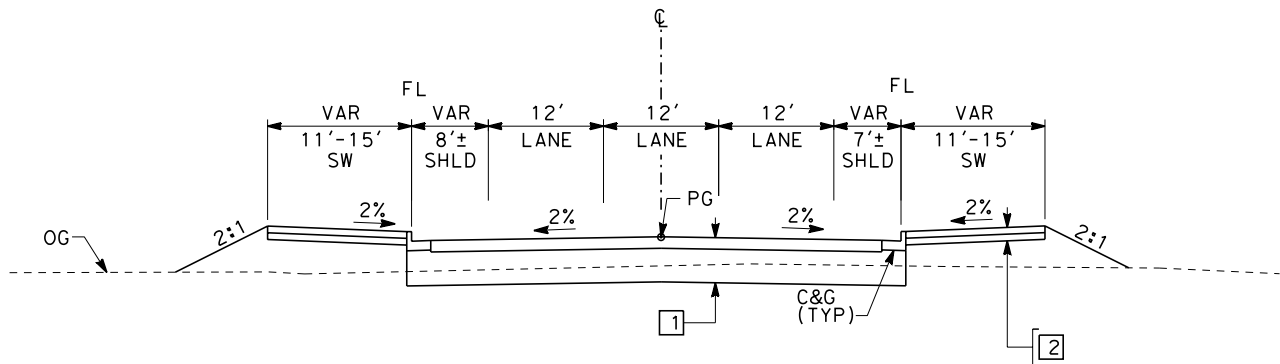
PROPOSED  
PRELIMINARY  
DESIGN

NOT FOR  
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
ROADWAY  
ROADWAY / GRADE SEPARATION  
TYPICAL SECTIONS

CONTRACT NO.
DRAWING NO. CV-T3013-A3
SCALE AS SHOWN
SHEET NO.



H ST (VENTURA)  
"HS" 14+00.00 TO 19+50.00

STRUCTURAL SECTIONS  
TYPICAL ROADWAY

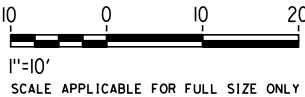
- 1

0.50' HMA (TYPE A)

1.50' CL2 AB
- 2

0.35' PCC

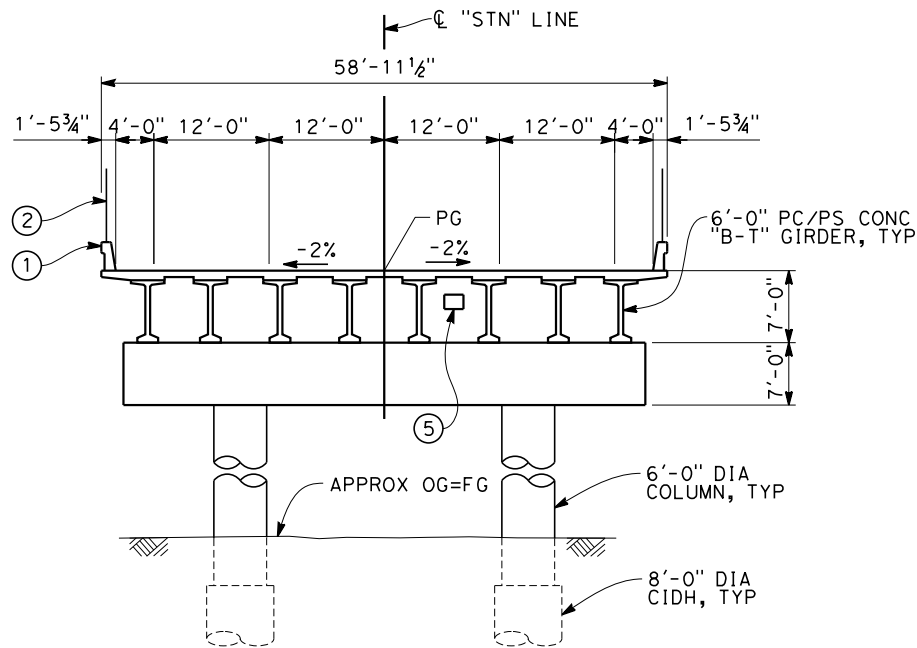
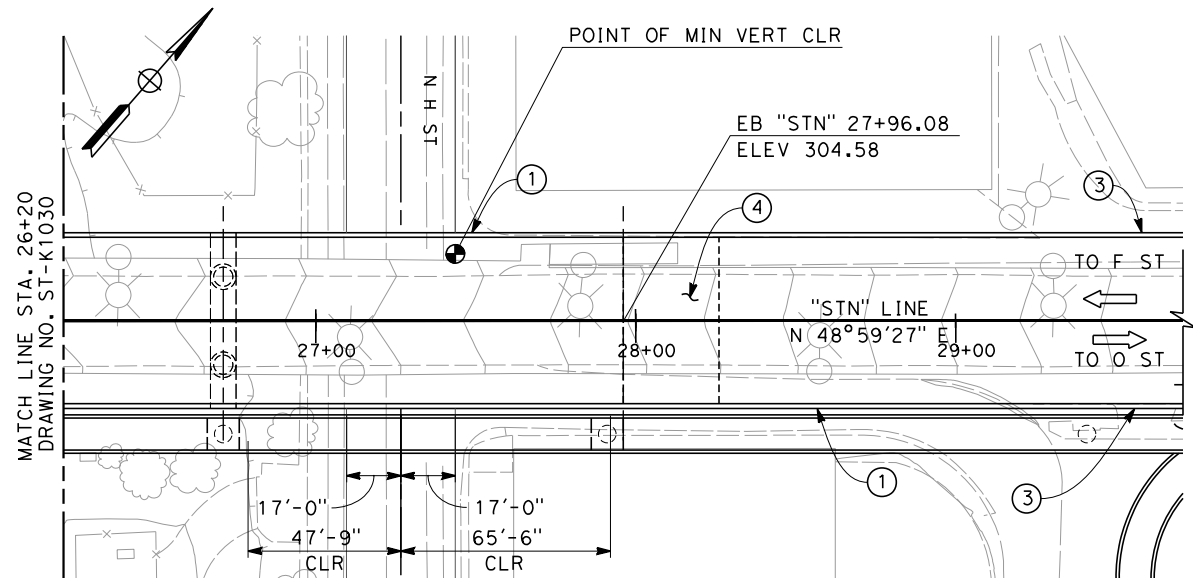
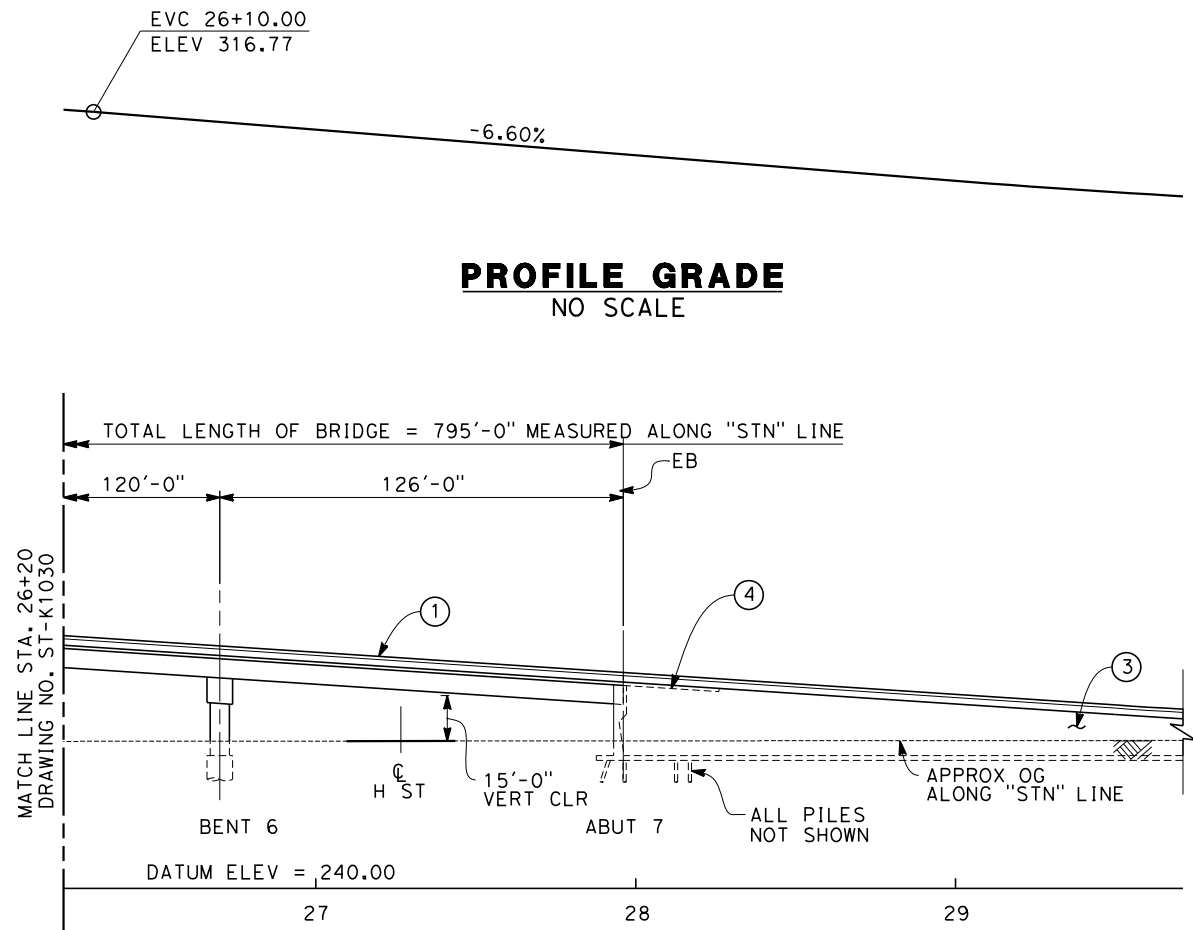
0.35' CL2 AB



CONTRACT NO.
DRAWING NO. ST-K1030-A3
SCALE AS SHOWN
SHEET NO.



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**SECTION A**  
SCALE: 1"=10'-0"

NOTES:

- ① CONCRETE BARRIER (TYPE 736 MODIFIED)
- ② AR FENCE
- ③ RETAINING WALL, MSE
- ④ STRUCTURE APPROACH SLAB
- ⑤ FUTURE UTILITY OPENING

**ADDENDUM 3 - RFP HSR 11-16**

A	2012-06	FP	AA	RP	REVISED FOR ADDENDUM A
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S.T. MAK
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 06/12/12

**PROPOSED  
PRELIMINARY  
DESIGN**

**NOT FOR  
CONSTRUCTION**

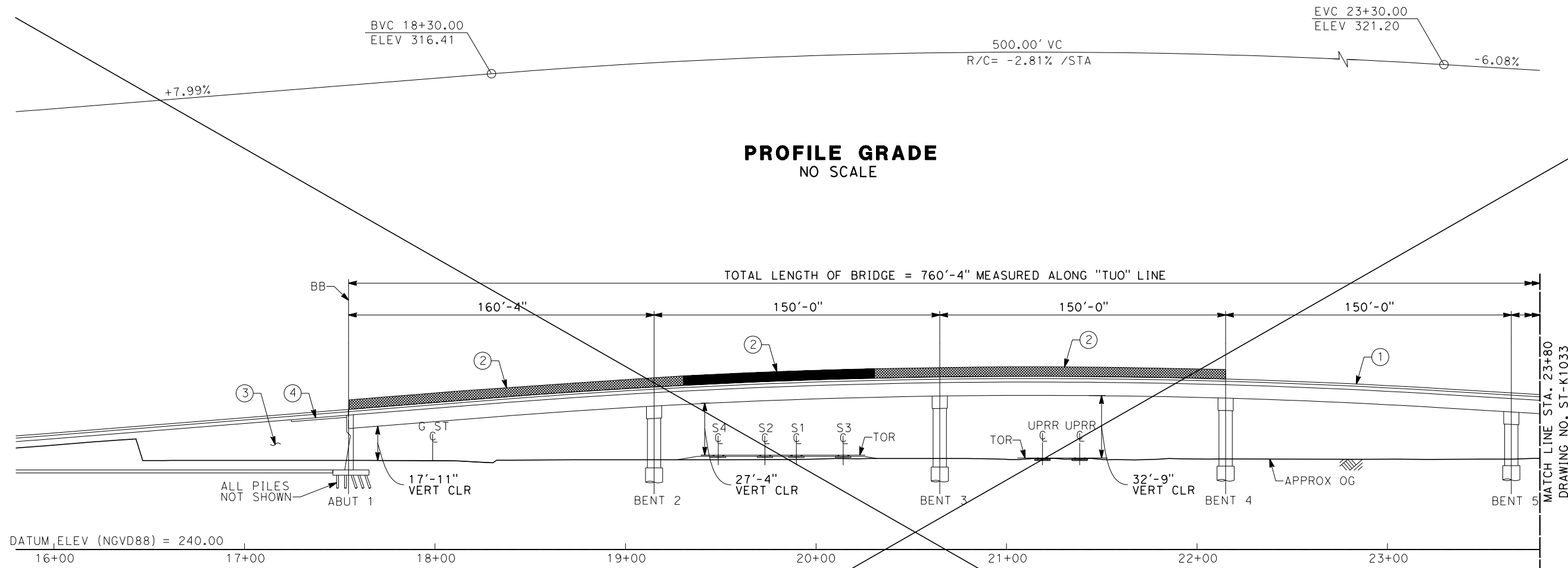


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION**

PACKAGE 1B  
ROADWAY  
DRAFT GENERAL PLAN  
STANISLAUS ST - SHEET 2 OF 2

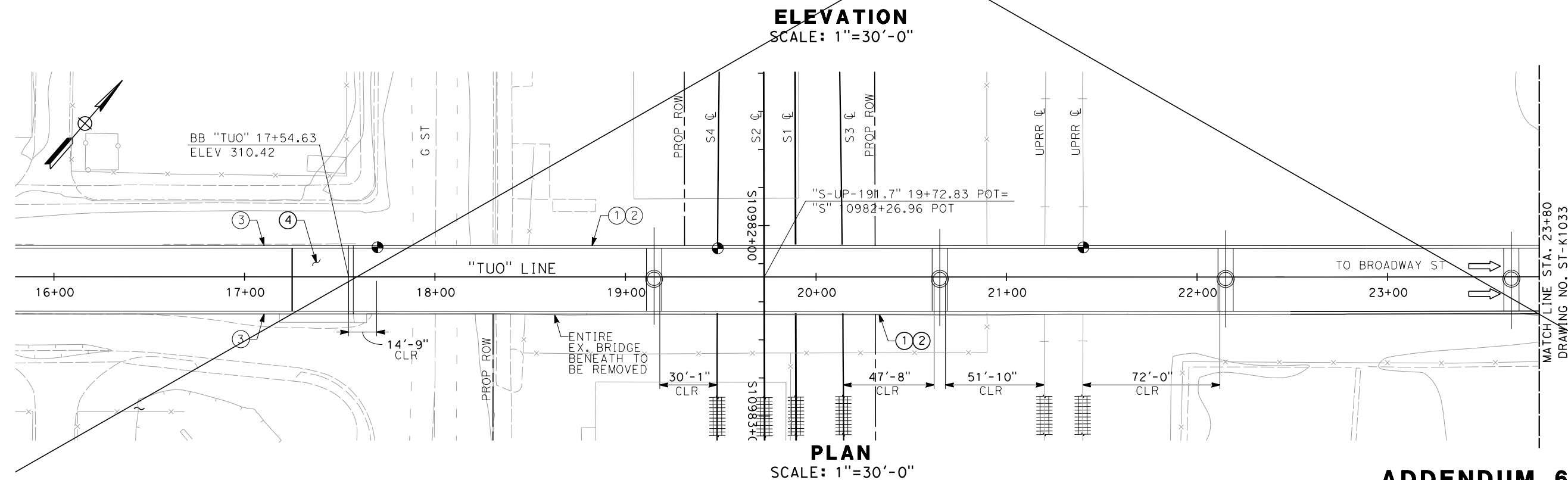
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DRAWING NO. ST-K1031-A3
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SHEET NO.

Paul.Tonkin 11/12/2012 5:00:53 PM CAHSR-r1.tbl PDF\_half\_black\_200dpi.plt\\global\\americas\\Jobs\\S-F\\131000\\131577\\4 Internal Project Data\\4-01 Record Copies of Outgoing Documents\\2012\\11-09 CP1B Del



- NOTES:**
- ① CONCRETE BARRIER (TYPE 736 MODIFIED)
  - ② AR FENCE
  - ③ MSE RETAINING WALL
  - ④ STRUCTURE APPROACH SLAB
  - ⑤ FOR UTILITY INFORMATION, SEE UTILITY BASE MAP PLANS.
  - ⑥ FOR INTRUSION DETECTION/PROTECTION, SEE ALIGNMENT PLANS.

- LEGEND:**
- ➔ INDICATES DIRECTION OF TRAFFIC
  - ⊕ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ▤ INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK



**DELETED SHEET**  
**ADDENDUM 6 - RFP HSR 11-16**

A	11/12/12	PAT	ES	RC	SHEET DELETED FROM RECORD SET
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY L. SMITH
DRAWN BY T. PRETZER
CHECKED BY E. MORAN
IN CHARGE Y. BERI
DATE 11/12/12

**PROPOSED  
PRELIMINARY  
DESIGN**

**NOT FOR  
CONSTRUCTION**

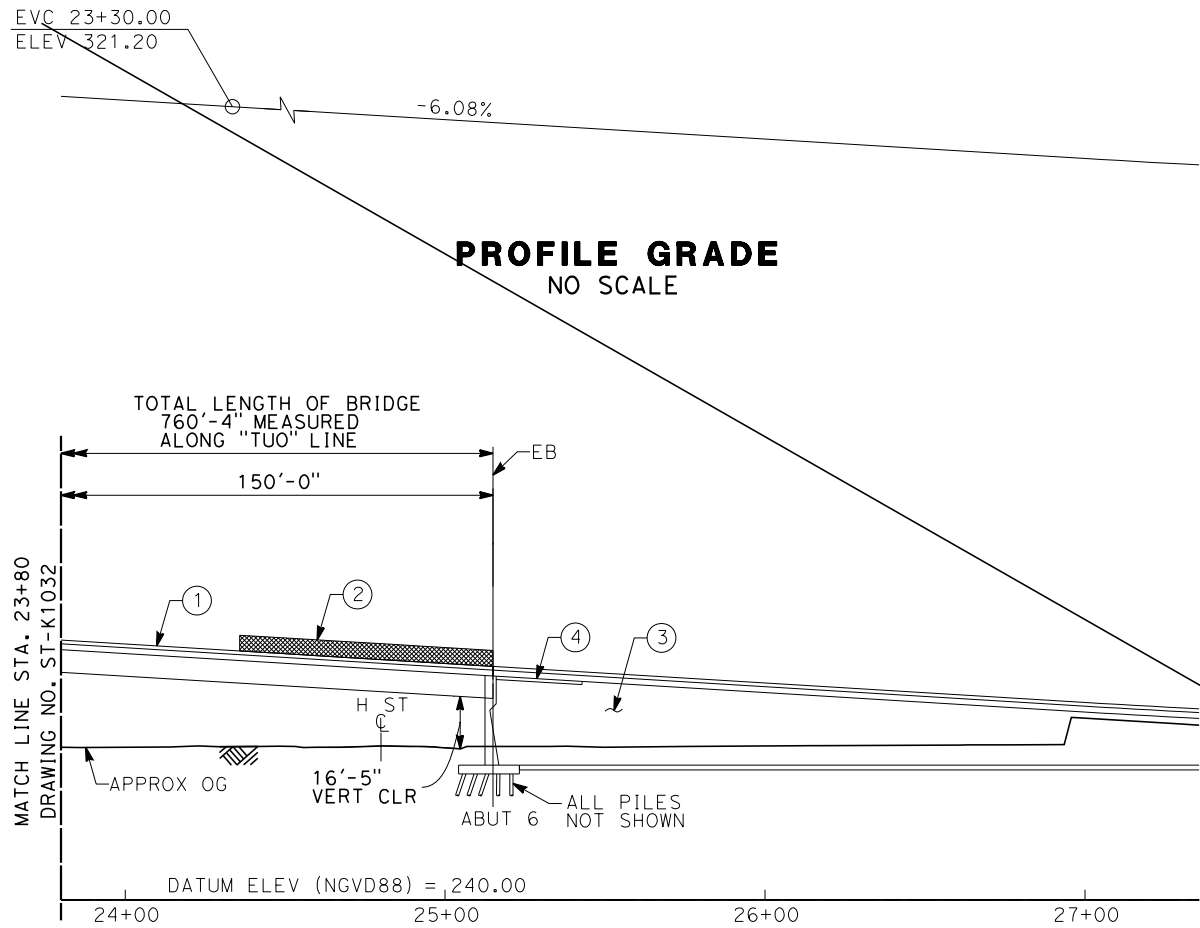


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION**  
PACKAGE 1B  
ROADWAY  
DRAFT GENERAL PLAN  
TUOLUMNE ST

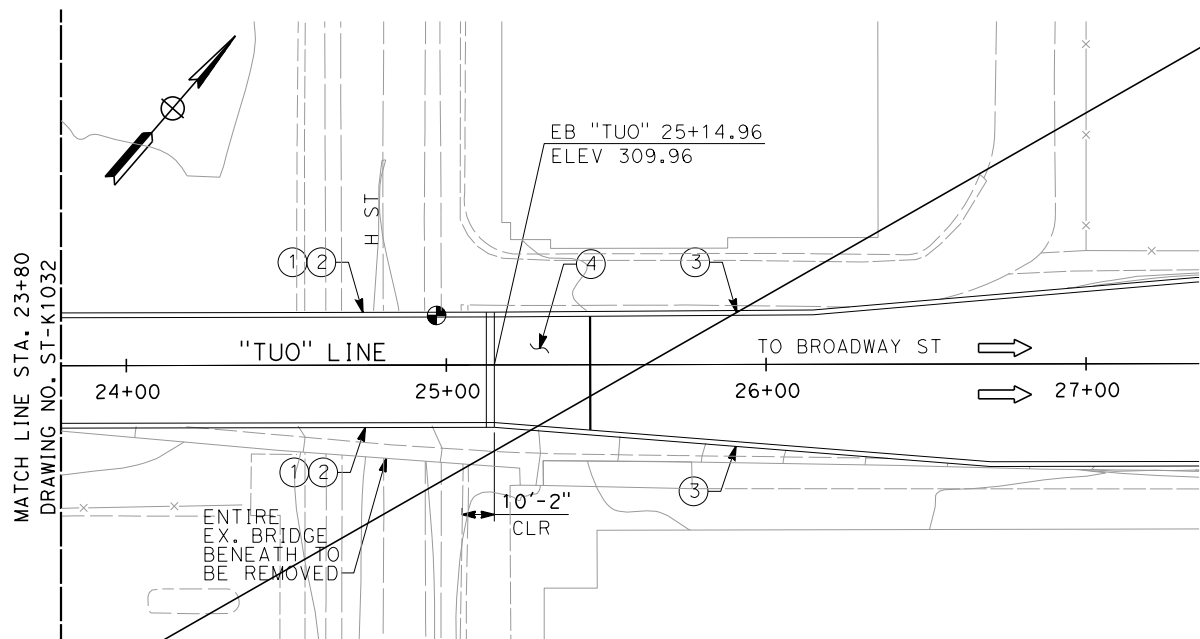
CONTRACT NO.
DRAWING NO. ST-K1032
SCALE AS SHOWN
SHEET NO.

11/13/2012 ADDENDUM 6 - RFP HSR 11-16

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**ELEVATION**  
SCALE: 1"=30'-0"



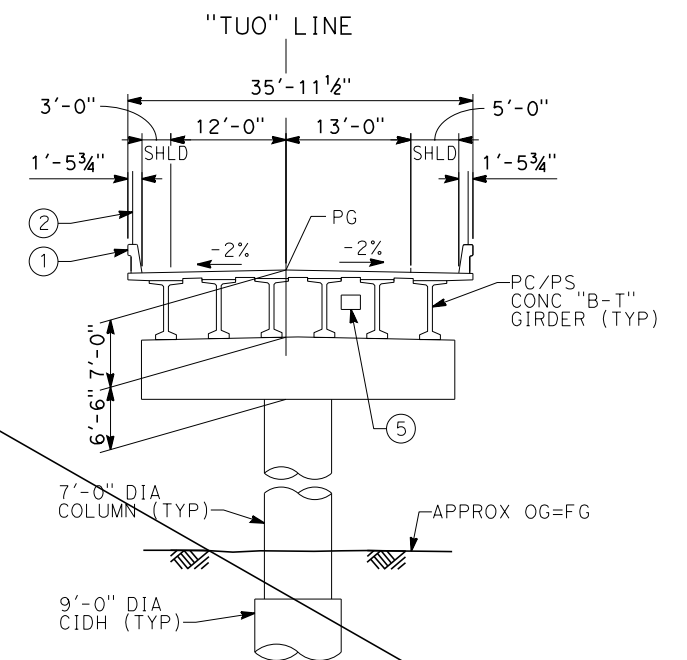
**PLAN**  
SCALE: 1"=30'-0"

**NOTES:**

- 1 CONCRETE BARRIER (TYPE 736 MODIFIED)
- 2 AR FENCE
- 3 MSE RETAINING WALL
- 4 STRUCTURE APPROACH SLAB
- 5 FUTURE UTILITY OPENING
- 6 FOR UTILITY INFORMATION, SEE UTILITY BASE MAP PLANS
- 7 FOR INTRUSION DETECTION/PROTECTION, SEE ALIGNMENT PLANS.

**LEGEND:**

- INDICATES DIRECTION OF TRAFFIC
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ||||| INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK



**TYPICAL SECTION**  
SCALE: 1"=10'-0"

**DELETED SHEET**  
**ADDENDUM 6 - RFP HSR 11-16**

A	11/12/12	PAT	ES	RC	SHEET DELETED FROM RECORD SET
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY L. SMITH
DRAWN BY T. PRETZER
CHECKED BY E. MORAN
IN CHARGE Y. BERI
DATE 11/12/12

**PROPOSED  
PRELIMINARY  
DESIGN**

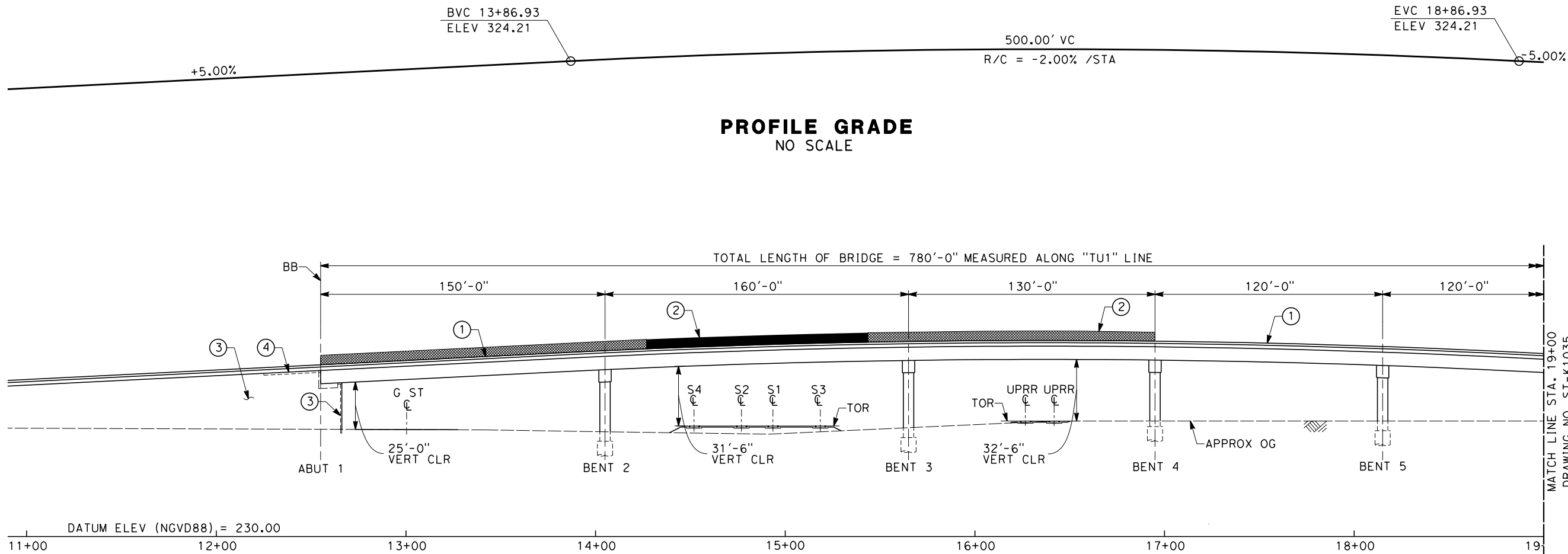
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION**  
PACKAGE 1B  
ROADWAY  
DRAFT GENERAL PLAN  
TUOLUMNE ST

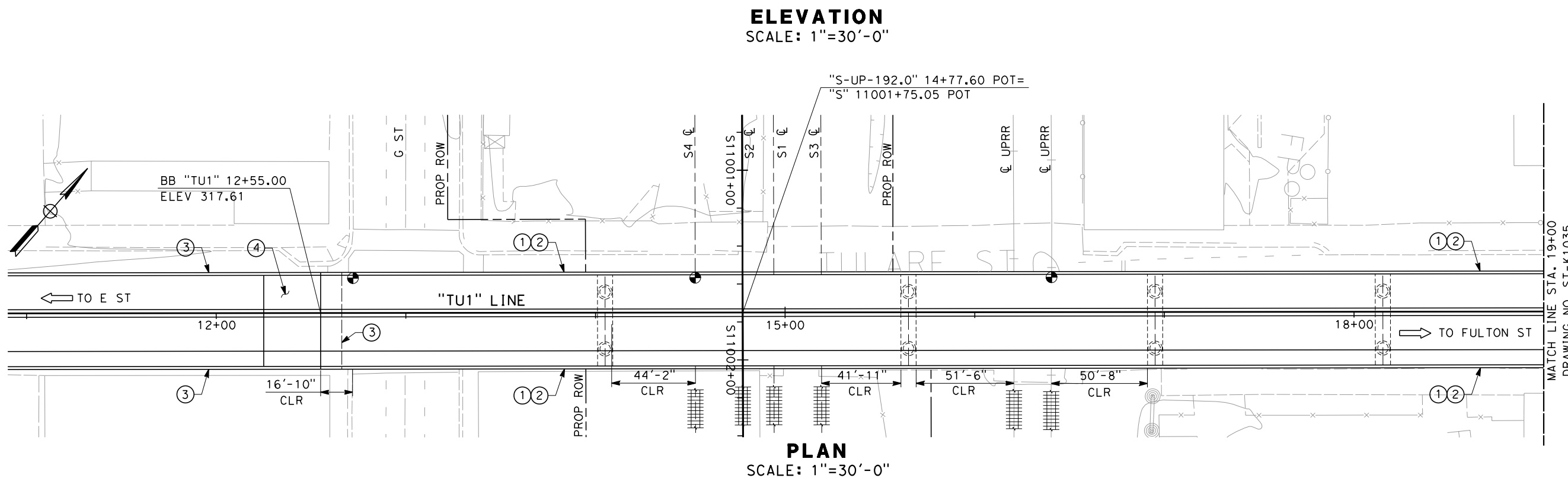
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DRAWING NO. ST-K1033
SCALE AS SHOWN
SHEET NO.

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- NOTES:**
- 1 CONCRETE BARRIER (TYPE 736 MODIFIED)
  - 2 AR FENCE
  - 3 MSE RETAINING WALL
  - 4 STRUCTURE APPROACH SLAB
  - 5 FOR UTILITY INFORMATION, SEE UTILITY BASE MAP PLANS.
  - 6 FOR INTRUSION DETECTION/PROTECTION, SEE ALIGNMENT PLANS.

- LEGEND:**
- INDICATES DIRECTION OF TRAFFIC
  - ⊕ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ||||| INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. BURGARD
DRAWN BY T. PRETZER
CHECKED BY E. MORAN
IN CHARGE Y. BERI
DATE 02/17/12

**PROPOSED  
PRELIMINARY  
DESIGN**

**NOT FOR  
CONSTRUCTION**



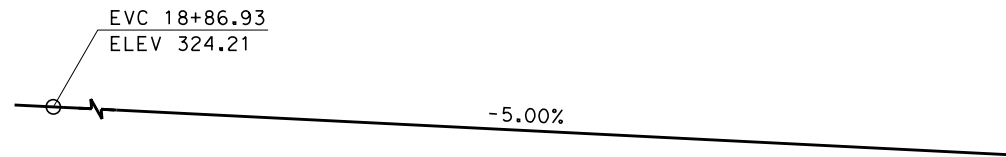
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**SIERRA SUBDIVISION**  
PACKAGE 1B  
ROADWAY  
DRAFT GENERAL PLAN  
TULARE ST (HST UNDERPASS)

CONTRACT NO.
DRAWING NO. ST-K1034
SCALE AS SHOWN
SHEET NO.

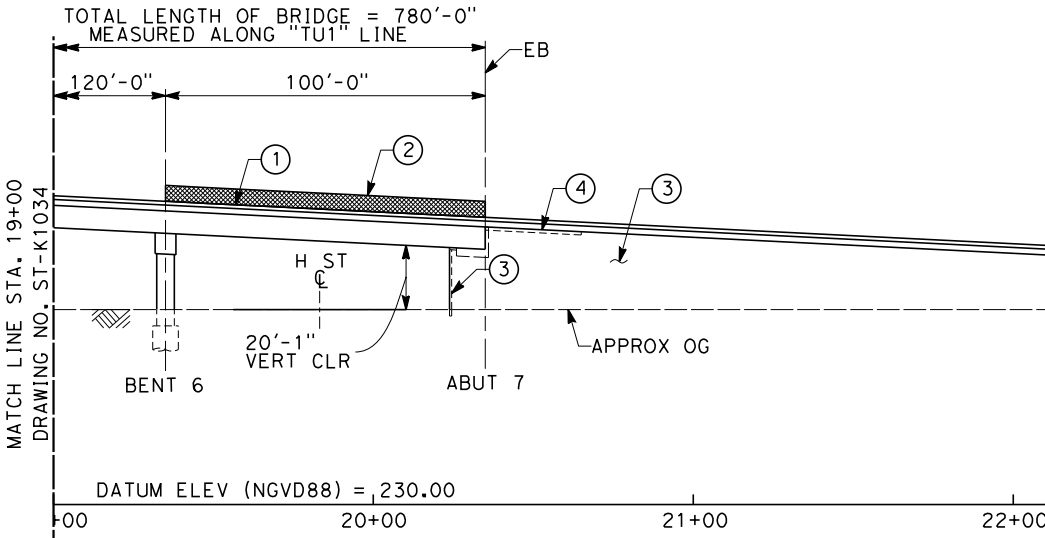


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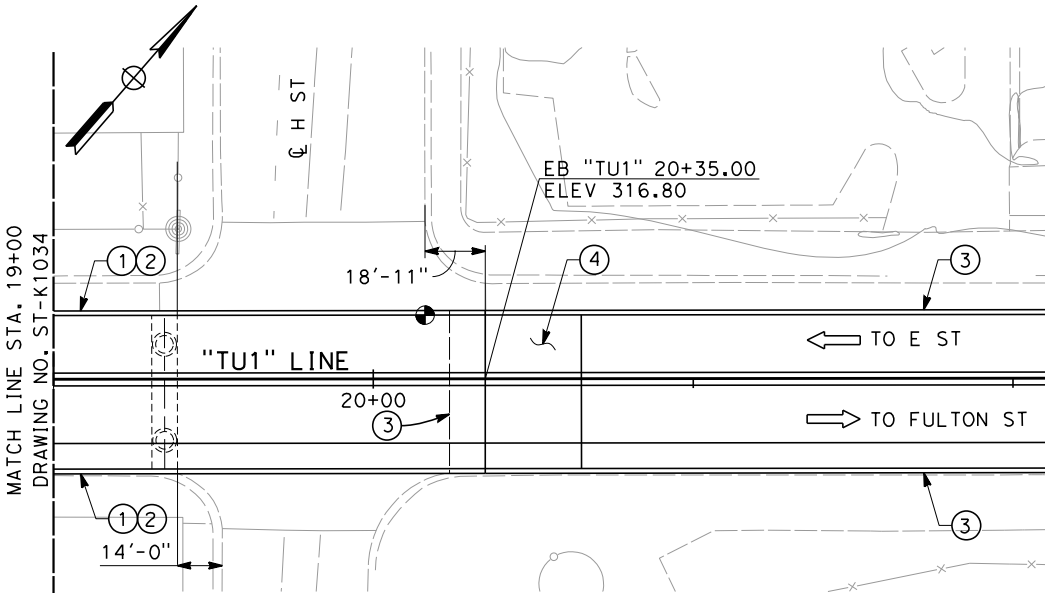
BUR52804



PROFILE GRADE  
NO SCALE



ELEVATION  
SCALE: 1"=30'-0"



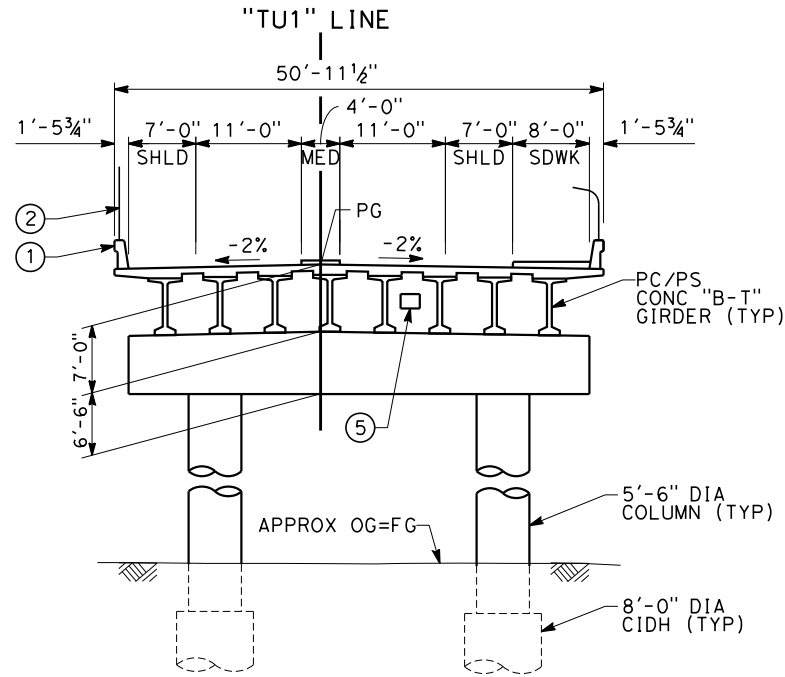
PLAN  
SCALE: 1"=30'-0"

NOTES:

- ① CONCRETE BARRIER (TYPE 736 MODIFIED)
- ② AR FENCE
- ③ MSE RETAINING WALL
- ④ STRUCTURE APPROACH SLAB
- ⑤ FUTURE UTILITY OPENING
- ⑥ FOR UTILITY INFORMATION, SEE UTILITY BASE MAP PLANS.
- ⑦ FOR INTRUSION DETECTION/PROTECTION, SEE ALIGNMENT PLANS.

LEGEND:

- INDICATES DIRECTION OF TRAFFIC
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ▤ INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK



TYPICAL SECTION  
SCALE: 1"=10'-0"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. BURGARD
DRAWN BY T. PRETZER
CHECKED BY E. MORAN
IN CHARGE Y. BERI
DATE 02/17/12

**PROPOSED  
PRELIMINARY  
DESIGN**

**NOT FOR  
CONSTRUCTION**

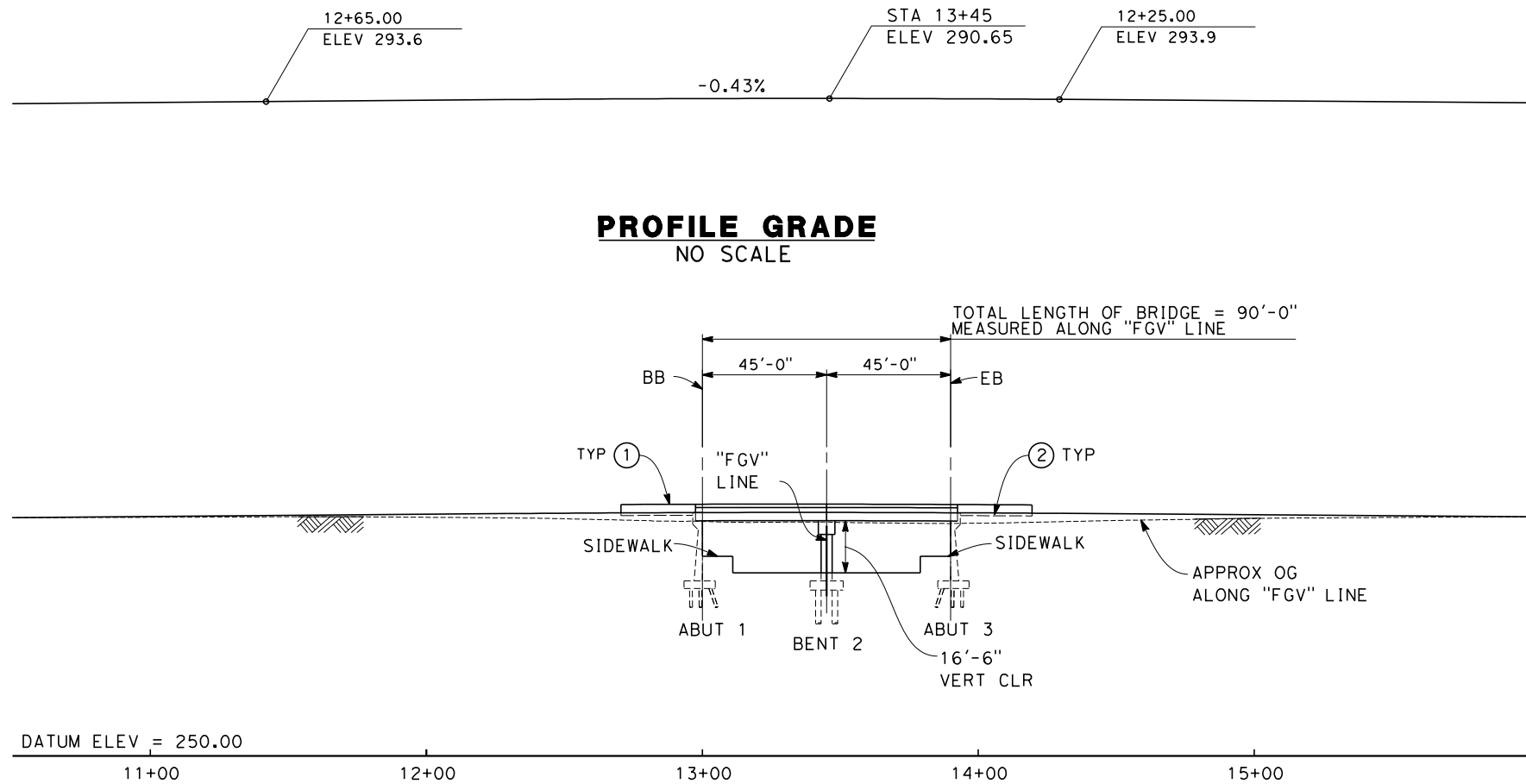


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION**

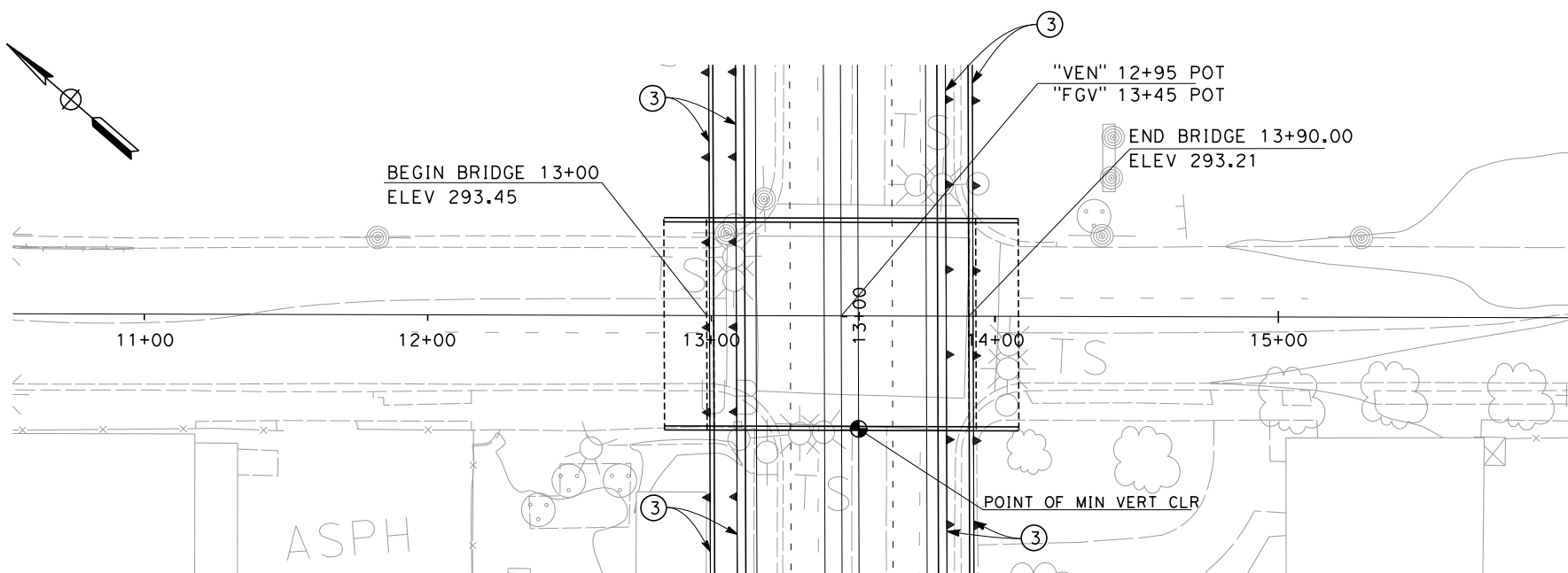
PACKAGE 1B  
ROADWAY  
DRAFT GENERAL PLAN  
TULARE ST (HST UNDERPASS)

CONTRACT NO.
DRAWING NO. ST-K1035
SCALE AS SHOWN
SHEET NO.

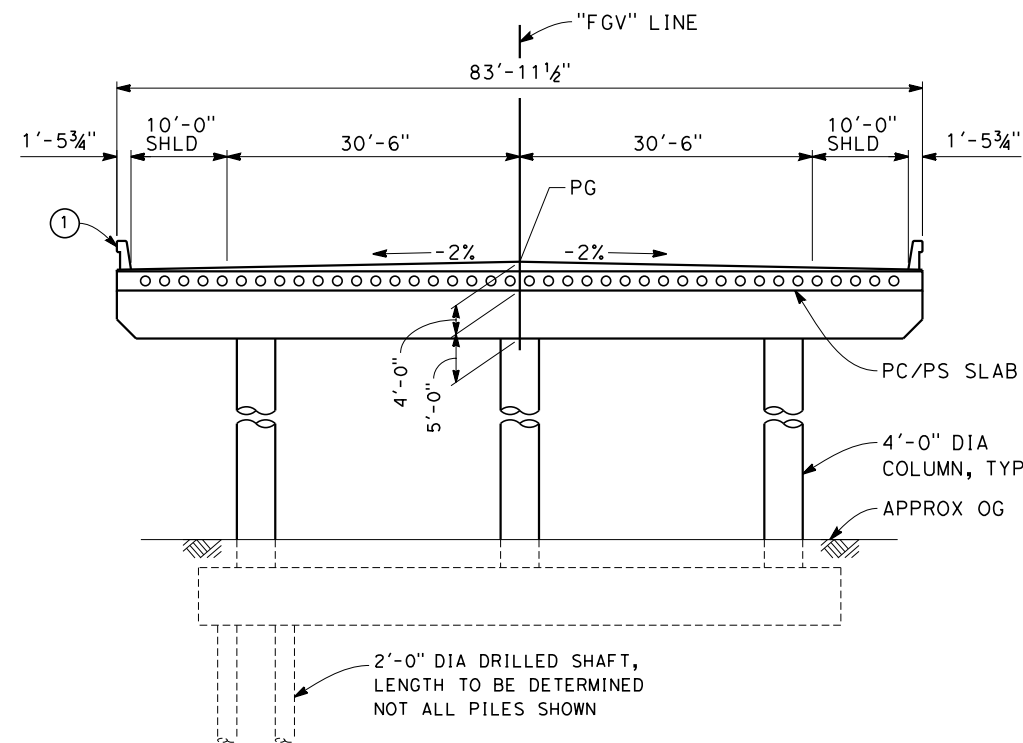
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**ELEVATION**  
SCALE: 1"=30'-0"



**PLAN**  
SCALE: 1"=30'-0"



**TYPICAL SECTION**  
SCALE: 1"=10'-0"

NOTES:

- ① CONCRETE BARRIER (TYPE 736 MODIFIED)
- ② STRUCTURE APPROACH SLAB

**ADDENDUM 3 - RFP HSR 11-16**

REV	DATE	BY	CHK	APP	DESCRIPTION
A	2012-06	FP	AA	RP	REVISED FOR ADDENDUM A

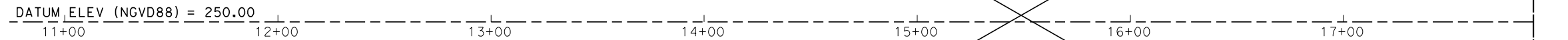
DESIGNED BY S.T. MAK
DRAWN BY F. PALERMO
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 06/12/12

<b>PROPOSED PRELIMINARY DESIGN</b>
<b>NOT FOR CONSTRUCTION</b>

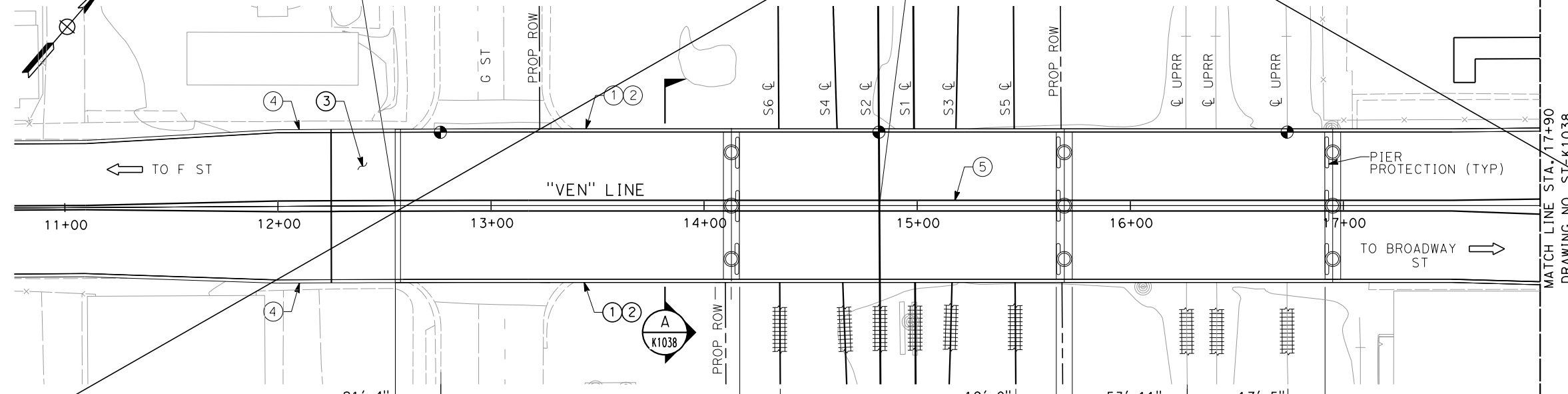


<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT SIERRA SUBDIVISION</b>
PACKAGE 1B ROADWAY
DRAFT GENERAL PLAN G ST (VENTURA ST OVERPASS)

CONTRACT NO.
DRAWING NO. ST-K1036-A3
SCALE AS SHOWN
SHEET NO.



SCALE: 1"=30'-0"



**PLAN**  
SCALE: 1"=30'-0"

- ## ADDENDUM 6 - RFP HSR 11-16

A	11/12/12	PAT	ES	RC	SHEET DELETED FROM RECORD SET
REV	DATE	BY	CHK	APP	DESCRIPTION

Y. BERI
DATE 11/12/12

**NOT FOR  
CONSTRUCTION**

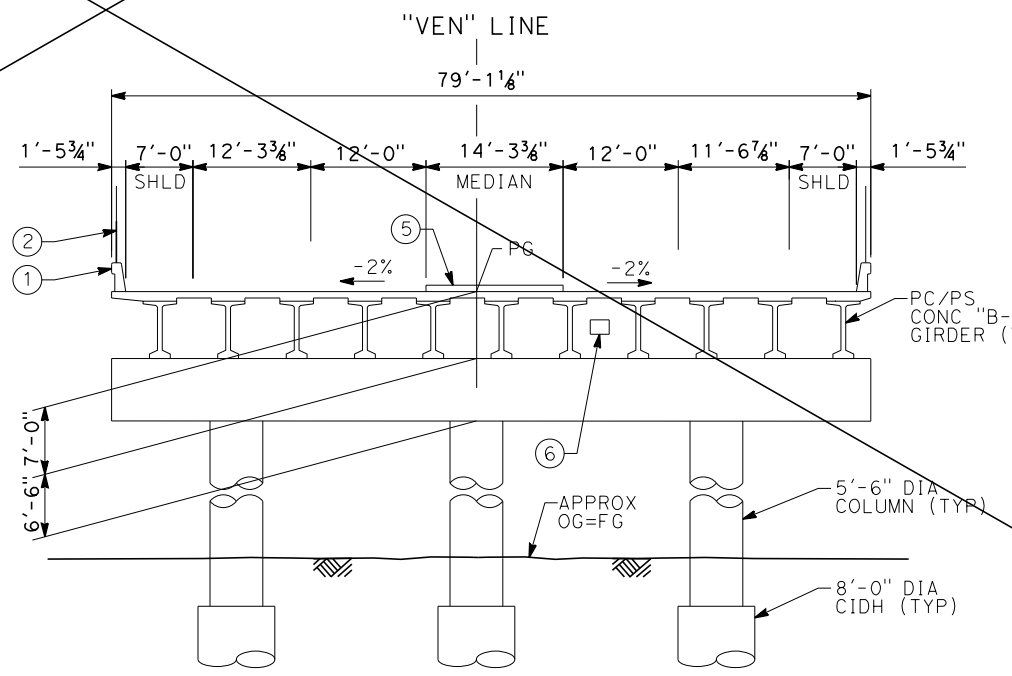
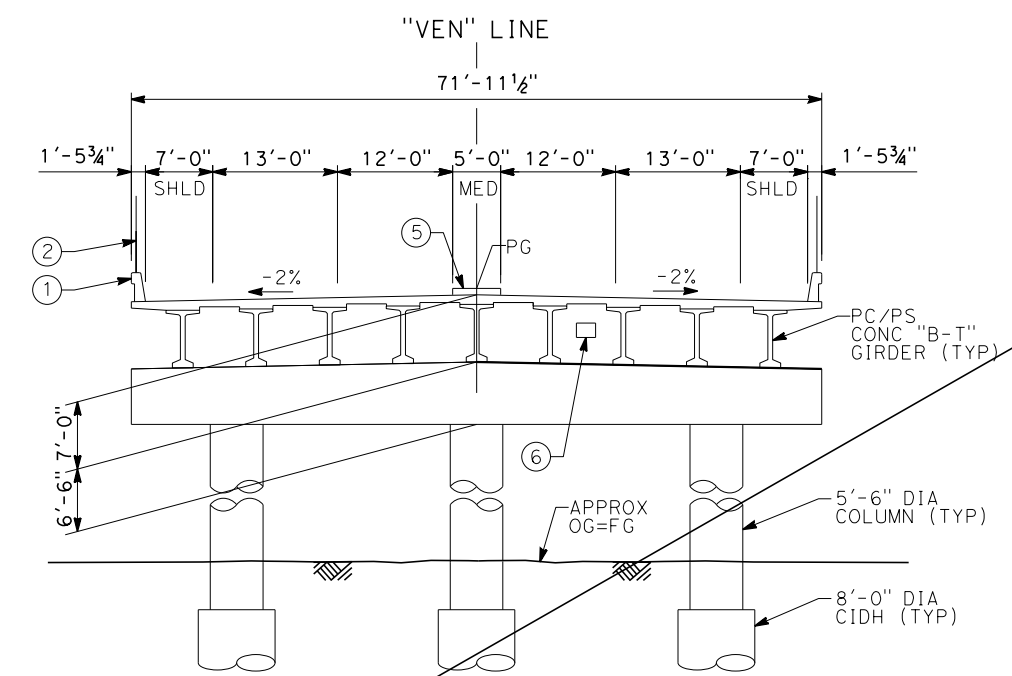
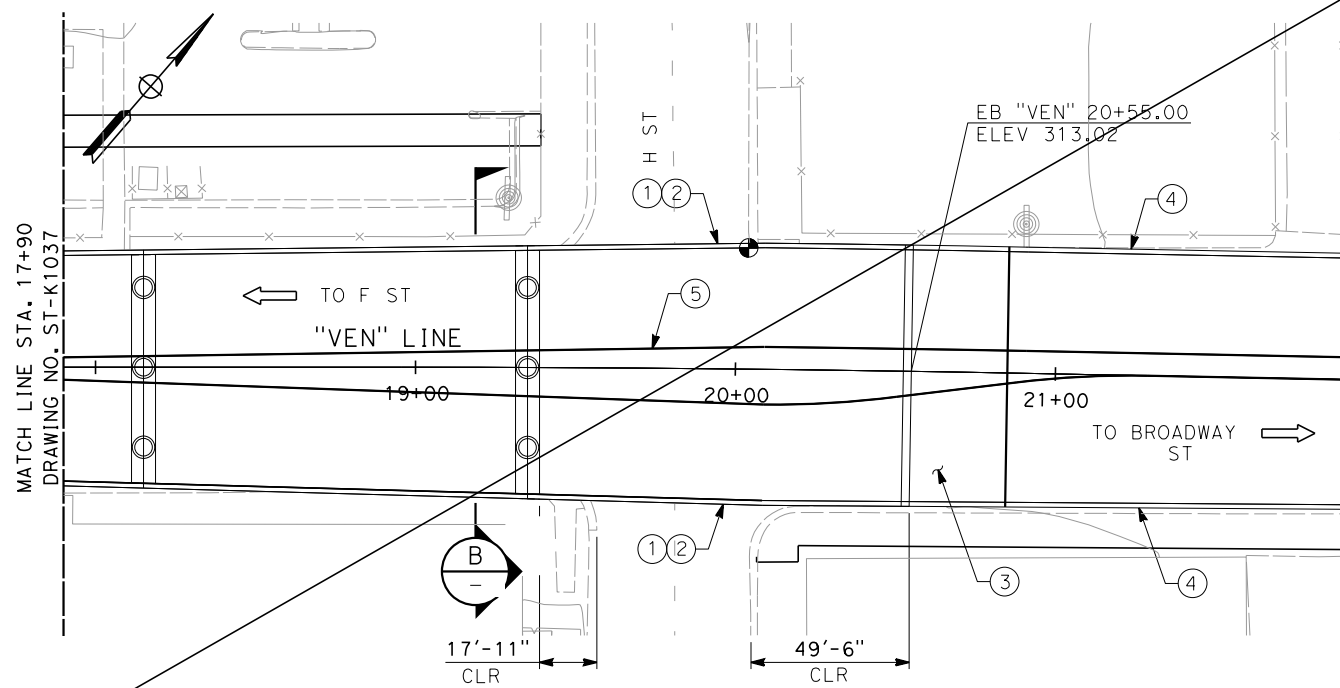
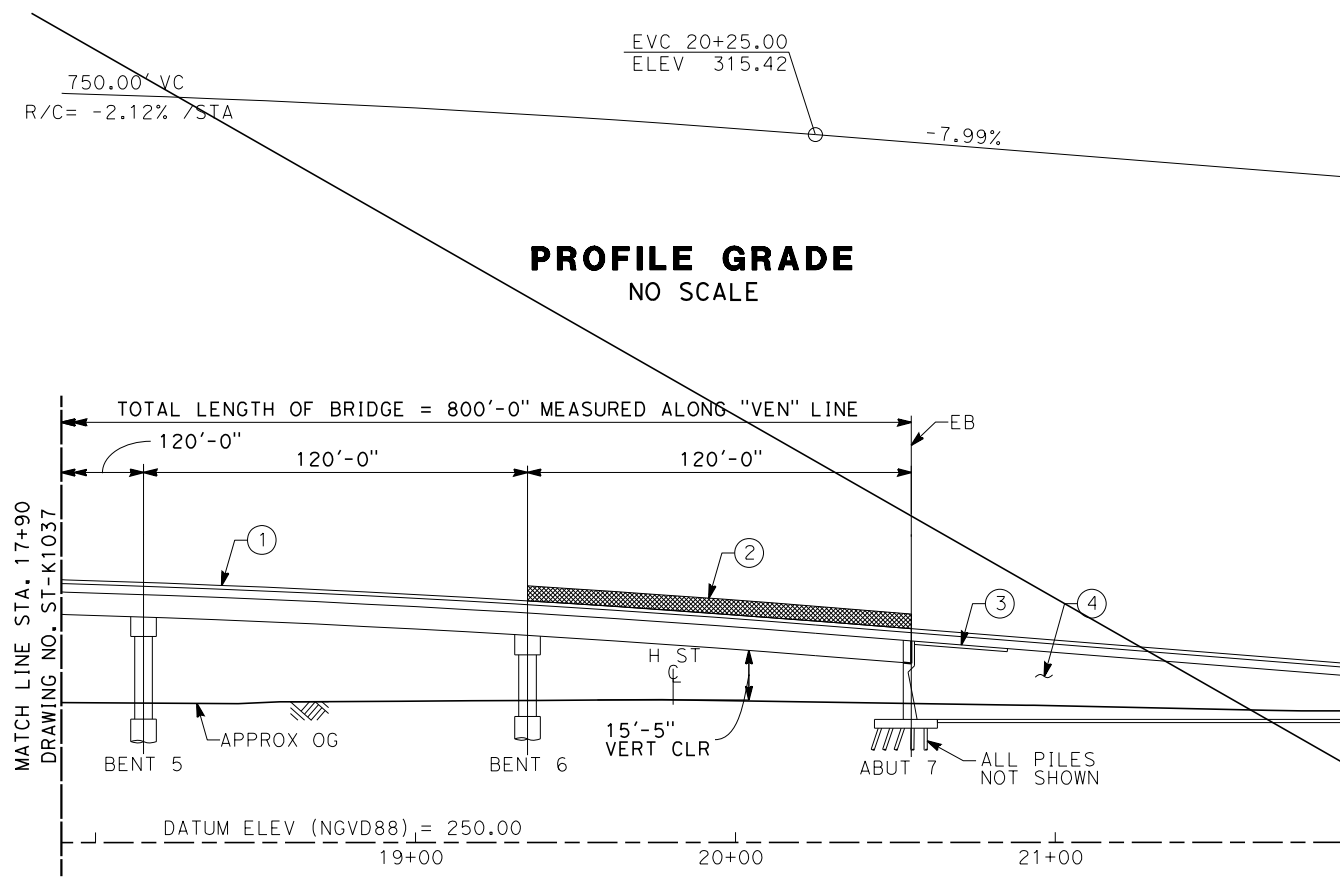


**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**SIERRA SUBDIVISION**  
 PACKAGE 1B  
 ROADWAY  
 DRAFT GENERAL PLAN  
 VENTURA ST


AS SHOWN
SHEET NO.

11/13/2012 11:09:30 AM CAHSR-r1.tbl PDF\_half\_black\_200dpi.ctb \\global\americas\Jobs\131000\131577\4 Internal Project Data\4-01 Record Copies of Outgoing Documents\2012\11-09 CP1B Del Paul.Tonkin



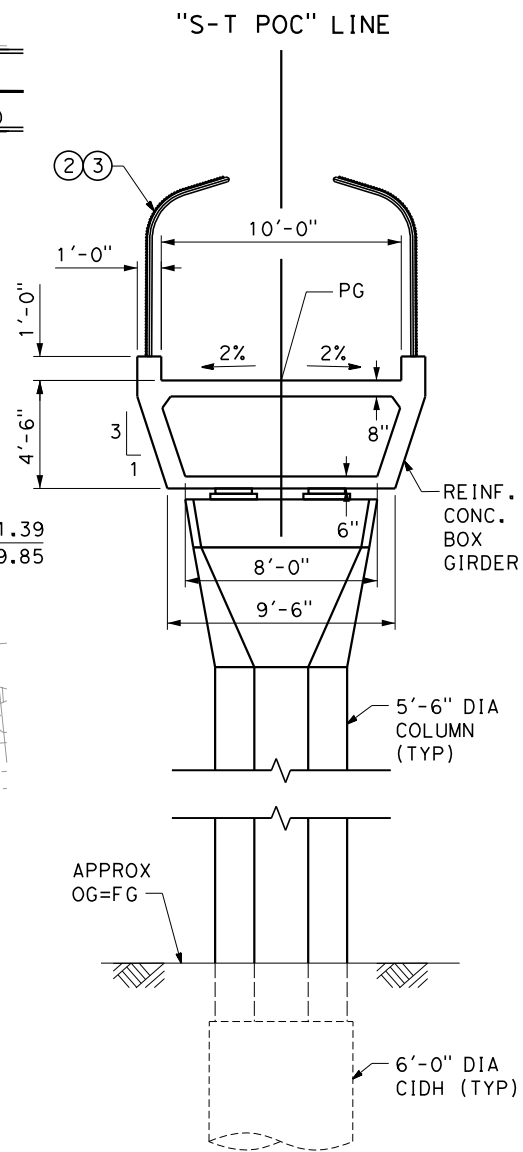
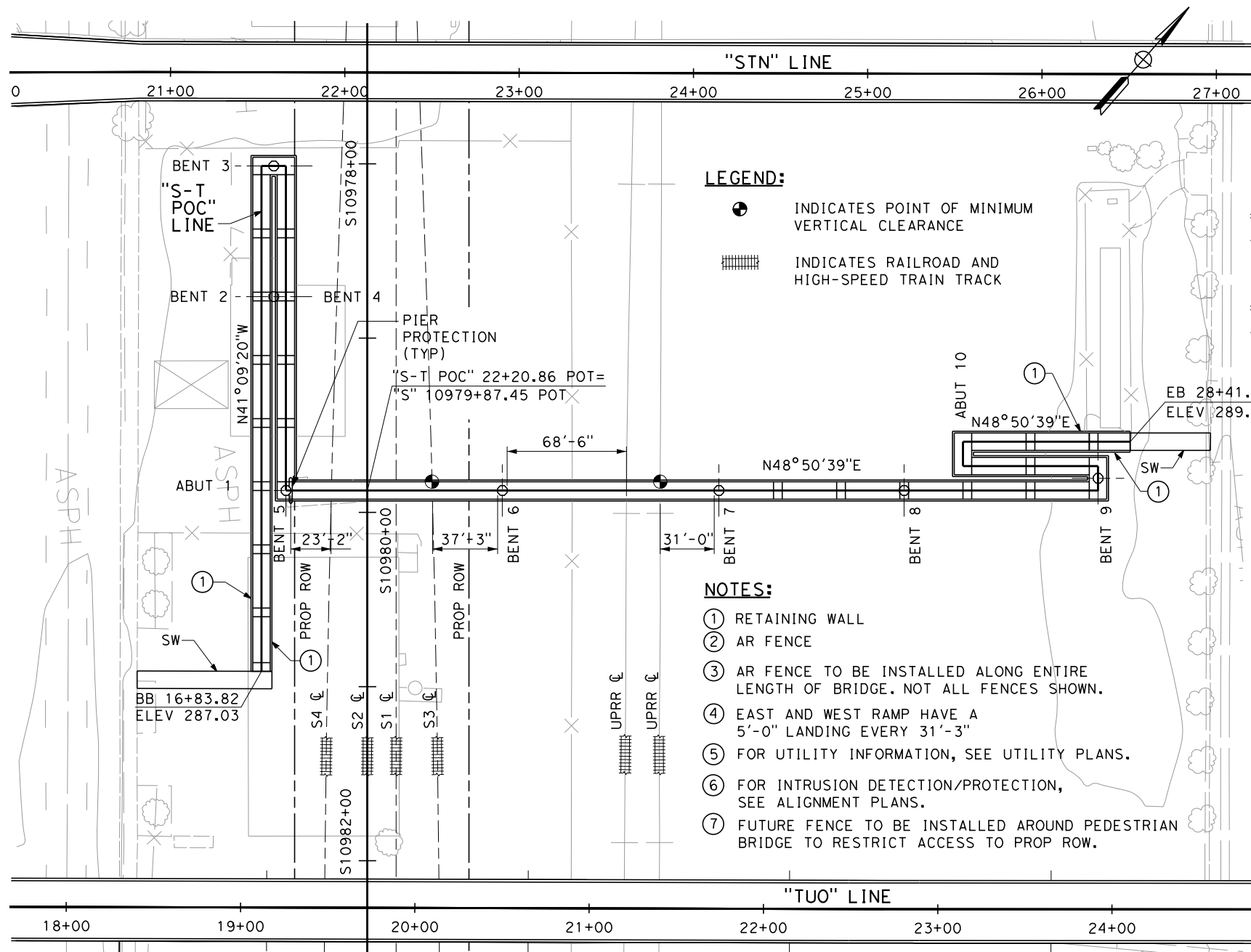
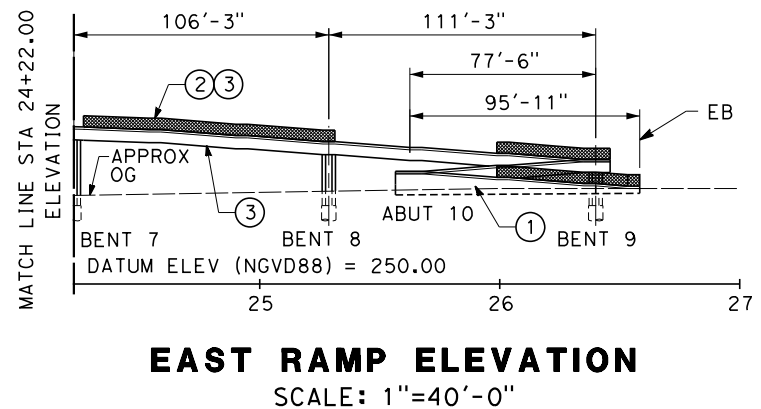
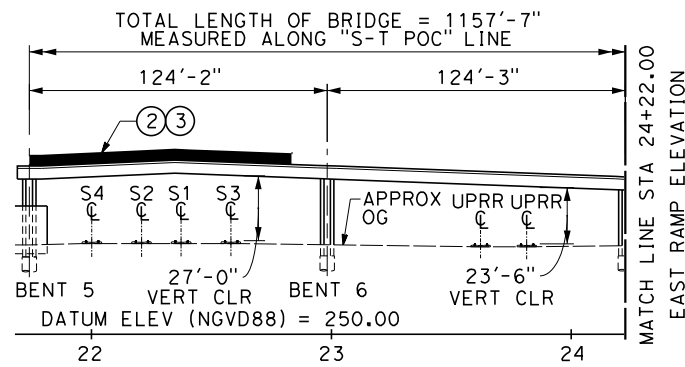
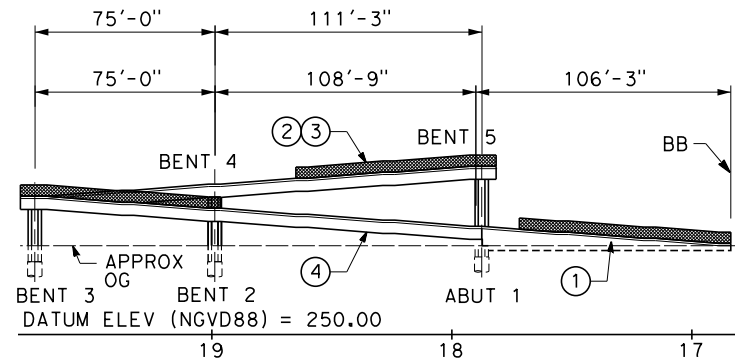
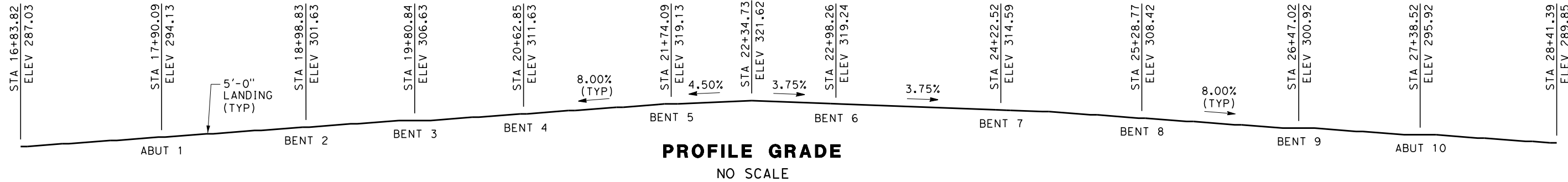
- NOTES:**
- 1 CONCRETE BARRIER (TYPE 736 MODIFIED)
  - 2 AR FENCE
  - 3 STRUCTURE APPROACH SLAB
  - 4 MSE RETAINING WALL
  - 5 BARRIER CURB
  - 6 FUTURE UTILITY OPENING
  - 7 FOR UTILITY INFORMATION, SEE UTILITY BASE MAP PLANS.
  - 8 FOR INTRUSION DETECTION/PROTECTION, SEE ALIGNMENT PLANS.
- LEGEND:**
- INDICATES DIRECTION OF TRAFFIC
  - ⊕ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ||||| INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK

**DELETED SHEET**  
**ADDENDUM 6 - RFP HSR 11-16**

						DESIGNED BY M. BURGARD	<b>PROPOSED PRELIMINARY DESIGN</b>  <b>NOT FOR CONSTRUCTION</b>	 <i>CALIFORNIA</i> HIGH-SPEED RAIL AUTHORITY	<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT SIERRA SUBDIVISION</b>			CONTRACT NO.
						DRAWN BY D. BARNHART						DRAWING NO. ST-K1038
						CHECKED BY E. MORAN						SCALE AS SHOWN
						IN CHARGE Y. BERI						SHEET NO.
A	11/12/12	PAT	ES	RC	SHEET DELETED FROM RECORD SET							
REV	DATE	BY	CHK	APP	DESCRIPTION							
						DATE 11/12/12						



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY E. MORAN
DRAWN BY D. BARNHART
CHECKED BY M. BURGARD
IN CHARGE Y. BERI
DATE 02/17/12

PROPOSED PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

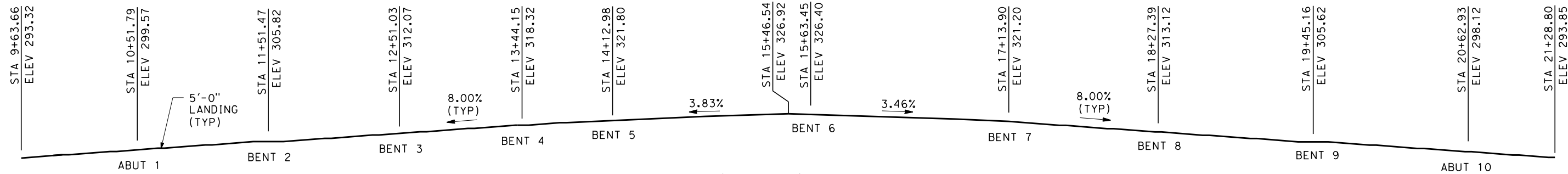


CALIFORNIA HIGH-SPEED TRAIN PROJECT SIERRA SUBDIVISION PACKAGE 1B ROADWAY DRAFT GENERAL PLAN STANISLAUS ST/TUOLUMNE ST - PEDESTRIAN BRIDGE
---

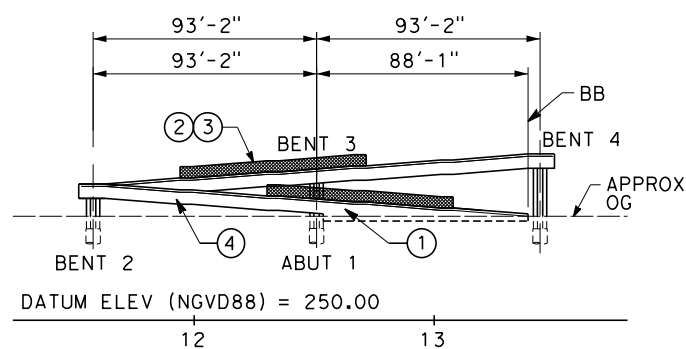
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DRAWING NO. ST-K1039
SCALE AS SHOWN
SHEET NO.

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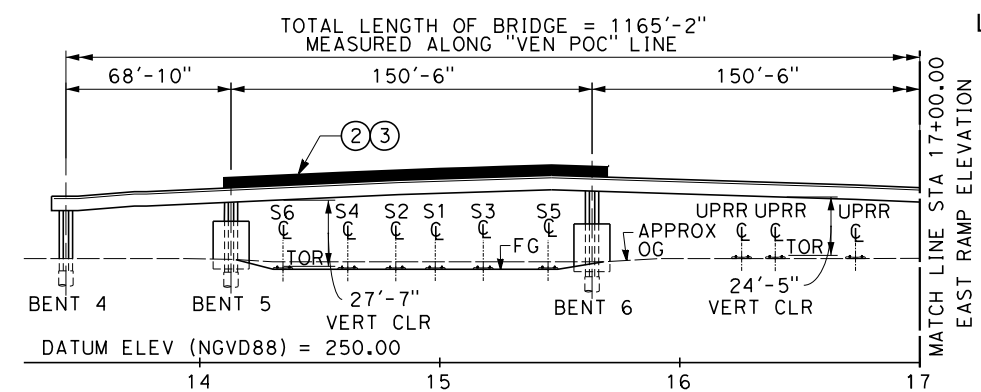
BUR52804



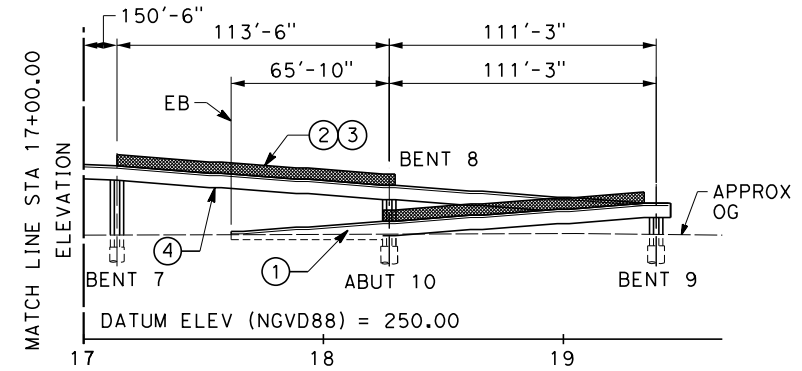
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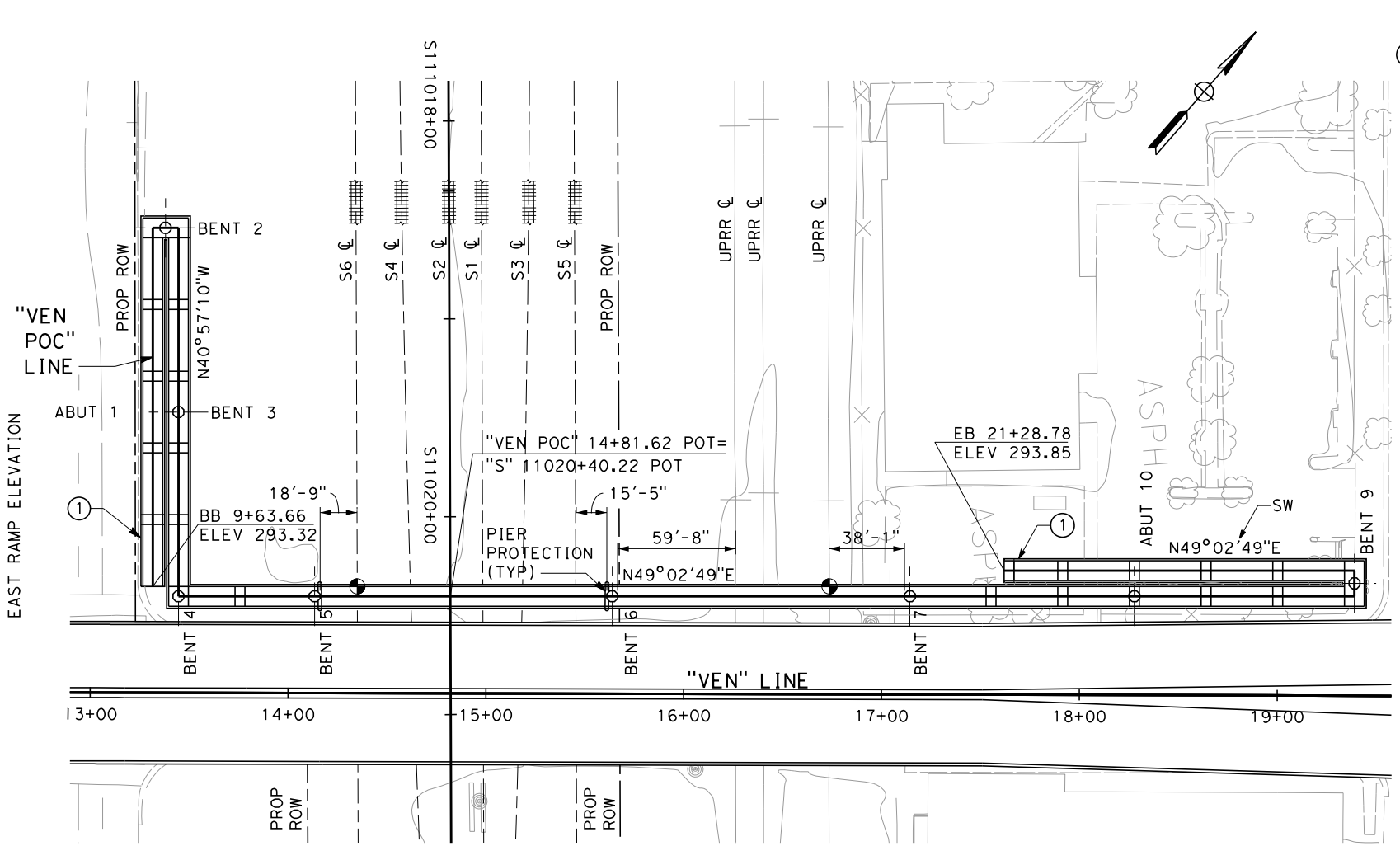
WEST RAMP ELEVATION  
SCALE: 1"=40'-0"



ELEVATION  
SCALE: 1"=40'-0"



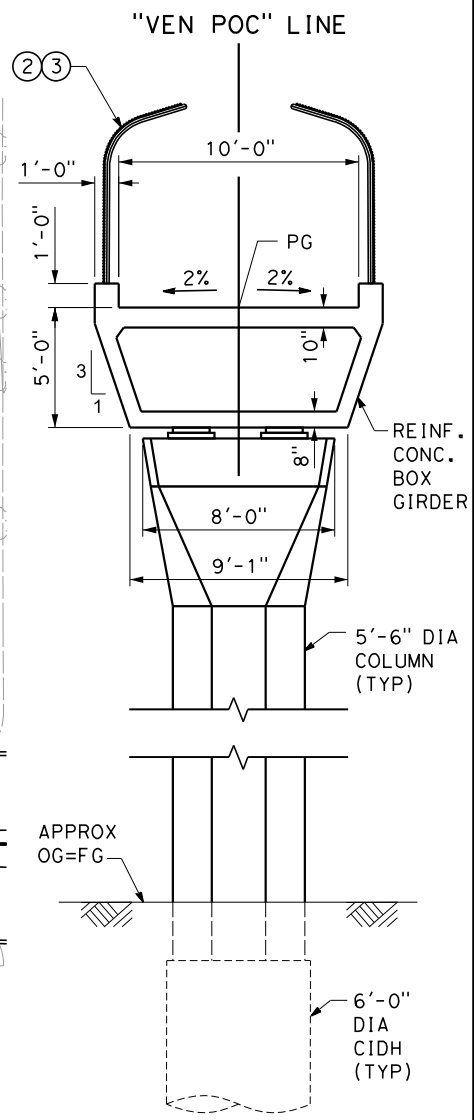
EAST RAMP ELEVATION  
SCALE: 1"=40'-0"



PLAN  
SCALE: 1"=40'-0"

- LEGEND:**
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - INDICATES RAILROAD AND HIGH-SPEED TRAIN TRACK

- NOTES:**
- RETAINING WALL
  - AR FENCE
  - AR FENCE TO BE INSTALLED ALONG ENTIRE LENGTH OF BRIDGE. NOT ALL FENCES SHOWN.
  - EAST AND WEST RAMP HAVE A 5'-0" LANDING EVERY 31'-3"
  - FOR UTILITY INFORMATION, SEE UTILITY PLANS.
  - FOR INTRUSION DETECTION/PROTECTION, SEE ALIGNMENT PLANS.
  - FUTURE FENCE TO BE INSTALLED AROUND PEDESTRIAN BRIDGE TO RESTRICT ACCESS TO PROP ROW.



TYPICAL SECTION  
SCALE: 1"=4'-0"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
E. MORAN  
DRAWN BY  
D. BARNHART  
CHECKED BY  
M. BURGARD  
IN CHARGE  
Y. BERI  
DATE  
02/17/12

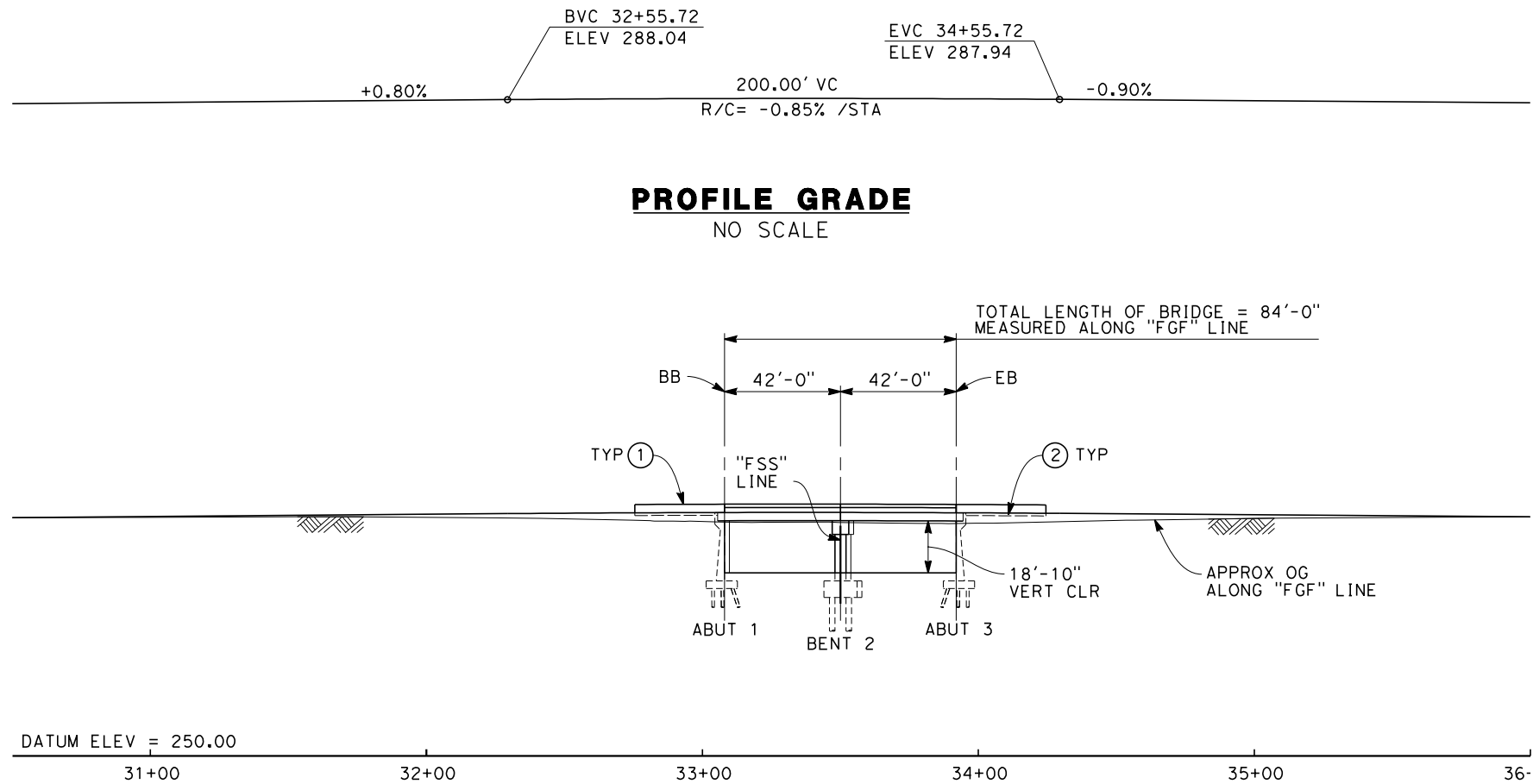
PROPOSED  
PRELIMINARY  
DESIGN  
  
NOT FOR  
CONSTRUCTION



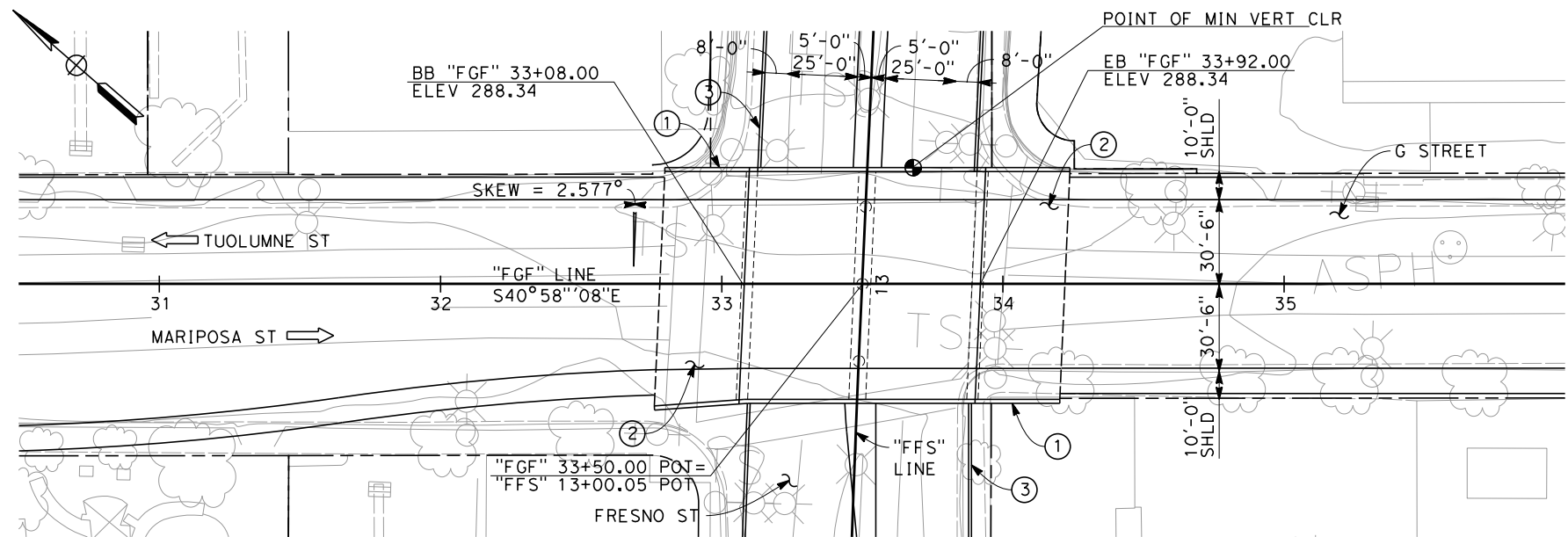
CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
ROADWAY  
DRAFT GENERAL PLAN  
VENTURA ST - PEDESTRIAN BRIDGE

CONTRACT NO.  
DRAWING NO.  
ST-K1040  
SCALE  
AS SHOWN  
SHEET NO.

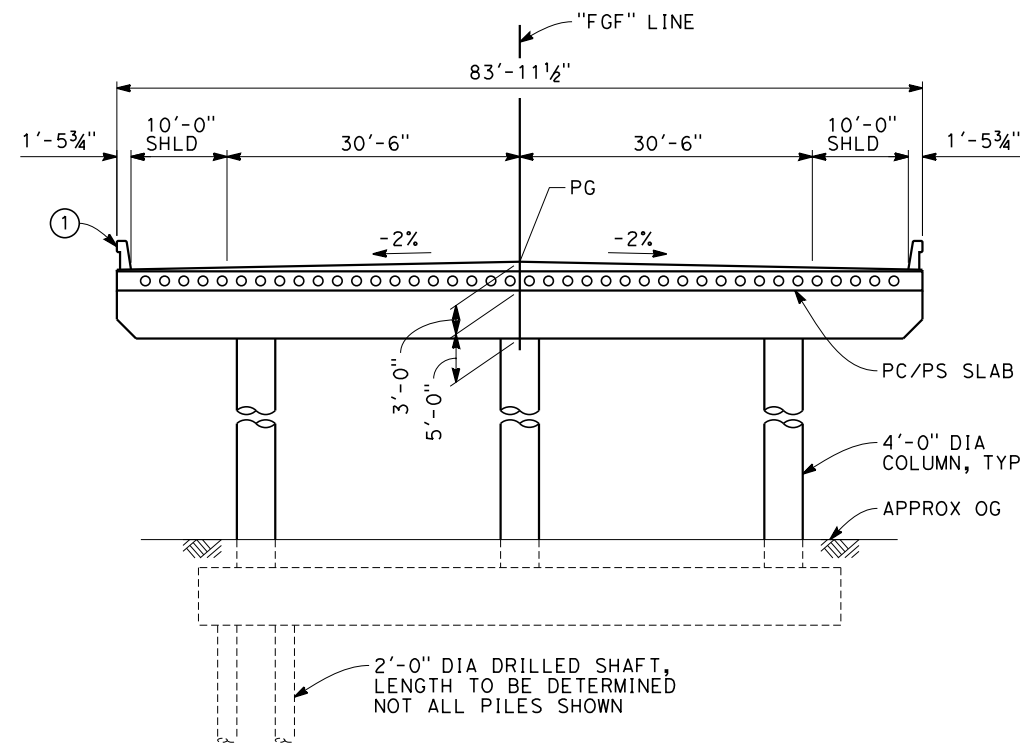
frank.palermo 6/12/2012 5:08:43 PM CAHSR-r1.tbl PDF\_half\_black\_200dpi.plt \\global\americas\Jobs\5-F\131000\131577\4 Internal Project Data\4-03 Drawings\4-03-03 30% Design\4-03-03-05 Design Sheets\Structu



**ELEVATION**  
SCALE: 1"=30'-0"



**PLAN**  
SCALE: 1"=30'-0"



**TYPICAL SECTION**  
SCALE: 1"=10'-0"

NOTES:

- ① CONCRETE BARRIER (TYPE 736 MODIFIED)
- ② STRUCTURE APPROACH SLAB
- ③ RETAINING WALL, TYPE TO BE DETERMINED

**ADDENDUM 3 - RFP HSR 11-16**

REV	DATE	BY	CHK	APP	DESCRIPTION
A	2012-06	FP	AA	RP	REVISED FOR ADDENDUM A

DESIGNED BY S.T. MAK
DRAWN BY J. VALENZUELA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 06/12/12

**PROPOSED  
PRELIMINARY  
DESIGN**

**NOT FOR  
CONSTRUCTION**

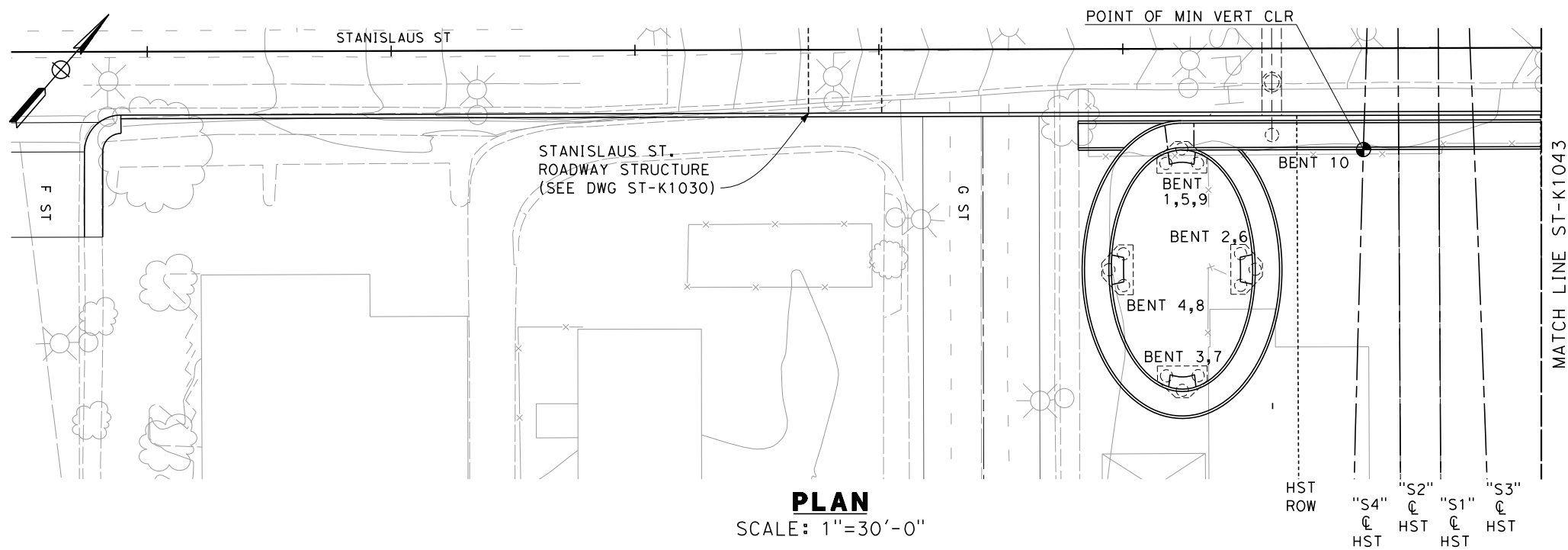
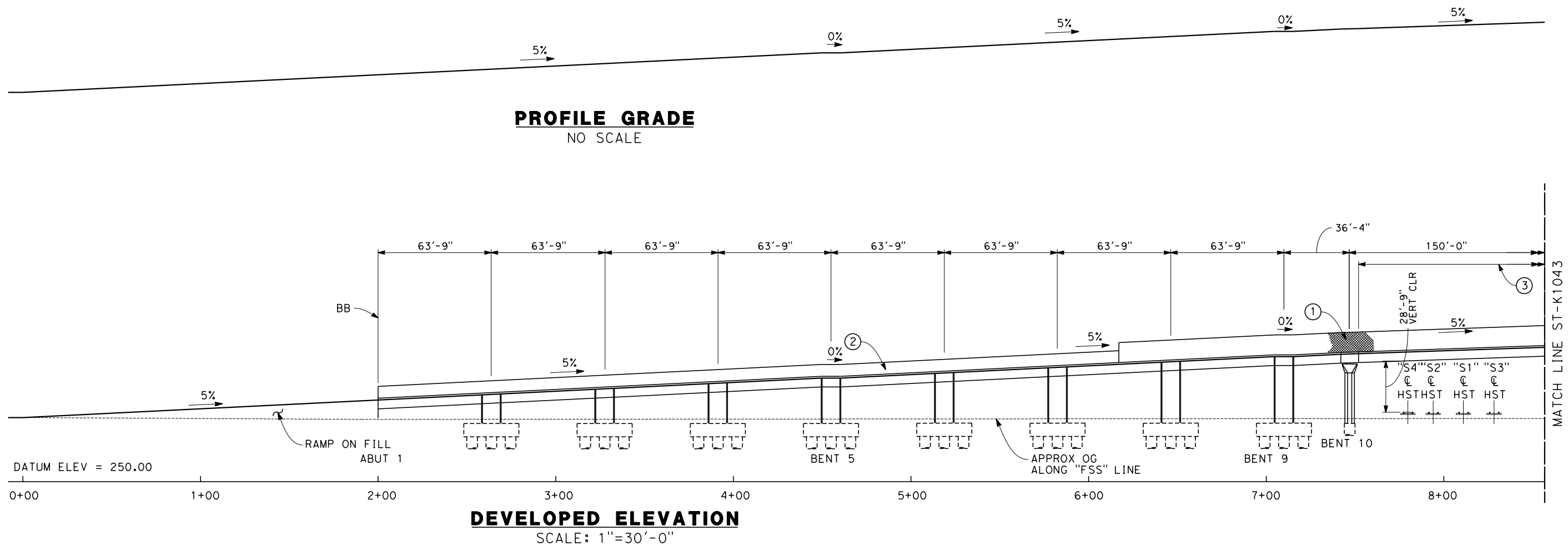


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION**

PACKAGE 1B  
ROADWAY  
DRAFT GENERAL PLAN  
G ST (FRESNO ST OVERPASS)




CONTRACT NO.
DRAWING NO. ST-K1041-A3
SCALE AS SHOWN
SHEET NO.

06/29/2012 ADDENDUM 3 - RFP HSR 11-16

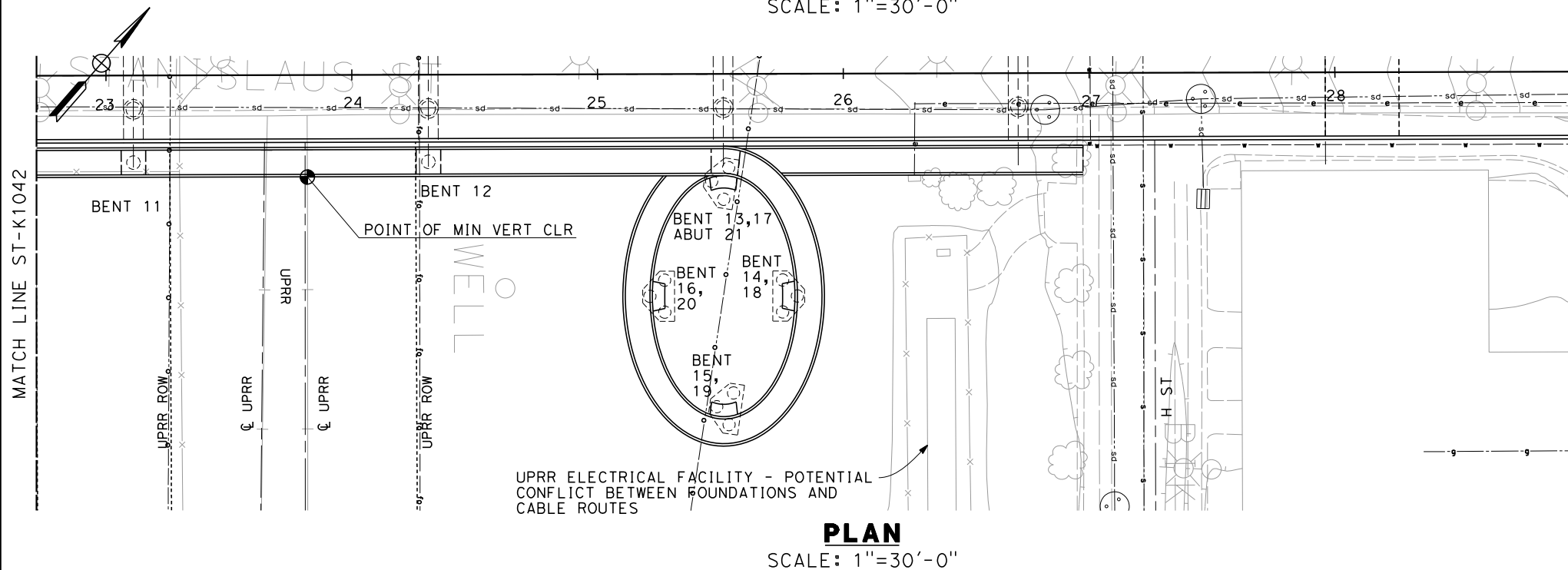
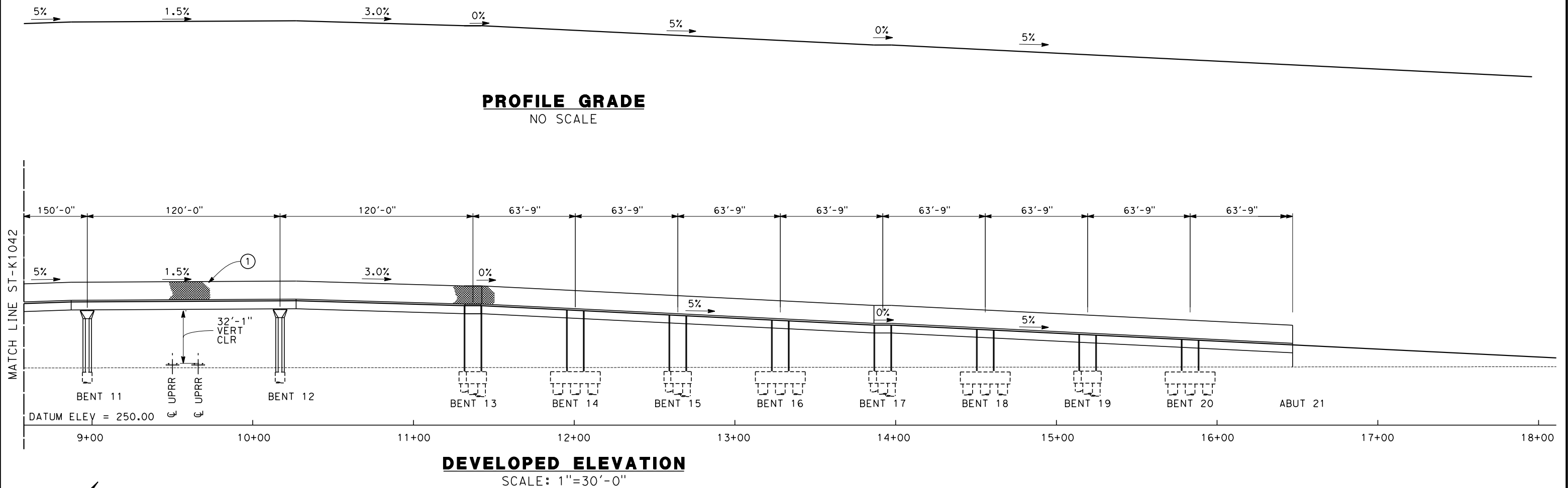


- NOTES:
- ① AR FENCE
  - ② PEDESTRIAN FENCE
  - ③ SOLID PLATE ON AR FENCE

## ADDENDUM 3 - RFP HSR 11-16

						DESIGNED BY M. FISHER	<b>PROPOSED PRELIMINARY DESIGN</b>  <b>NOT FOR CONSTRUCTION</b>	  	<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT SIERRA SUBDIVISION</b> PACKAGE 1B ROADWAY DRAFT GENERAL PLAN STANISLAUS ST - PEDESTRIAN BRIDGE	CONTRACT NO.
						DRAWN BY F. PALERMO				DRAWING NO. ST-K1042-A3
						CHECKED BY A. ARMSTRONG				SCALE AS SHOWN
A	2012-06	FP	AA	RP	REVISED FOR ADDENDUM A	IN CHARGE R. COFFIN				SHEET NO.
REV	DATE	BY	CHK	APP	DESCRIPTION	DATE 06/12/12				







- ① AR FENCE
- ② PEDESTRIAN FENCE
- ③ SOLID PLATE ON AR FENCE

**REPLACEMENT SHEET**  
**ADDENDUM 4 - RFP HSR 11-16**

						DESIGNED BY M. FISHER
						DRAWN BY F. PALERMO
						CHECKED BY A. ARMSTRONG
B	2012-07	FP	AA	RP	REVISED FOR ADDENDUM 4	IN CHARGE R. COFFIN
A	2012-06	FP	AA	RP	REVISED FOR ADDENDUM 3	DATE 07/13/12
REV	DATE	BY	CHK	APP	DESCRIPTION	

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PRELIMINARY  
DESIGN**

**NOT FOR  
CONSTRUCTION**

**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION**

PACKAGE 1B  
ROADWAY  
DRAFT GENERAL PLAN  
STANISLAUS ST - PEDESTRIAN BRIDGE

CONTRACT NO.
DRAWING NO. ST-K1043-B4
SCALE AS SHOWN
SHEET NO.

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VOLUME 4 - UTILITIES & GRADING AND DRAINAGE

DRAWING No.	DRAWING DESCRIPTION
GE-A0013	PACKAGE 1B - UTILITIES - INDEX OF DRAWINGS
UT-B0005	PACKAGE 1B - UTILITIES - GENERAL NOTES
UT-B0006	PACKAGE 1B - UTILITIES - LEGENDS, SYMBOLS & ABBREVIATIONS
UT-B0007	PACKAGE 1B - UTILITIES - COMPOSITE UTILITY PLAN - KEY MAP
UT-C4054	PACKAGE 1B - UTILITIES - COMPOSITE UTILITY PLAN - STA. 10970+00 TO STA. 10985+00
UT-C4055	PACKAGE 1B - UTILITIES - COMPOSITE UTILITY PLAN - STA. 10985+00 TO STA. 11000+00
UT-C4056	PACKAGE 1B - UTILITIES - COMPOSITE UTILITY PLAN - STA. 11000+00 TO STA. 11015+00
UT-C4057	PACKAGE 1B - UTILITIES - COMPOSITE UTILITY PLAN - STA. 11015+00 TO STA. 11030+00
UT-C4059	PACKAGE 1B - UTILITIES - COMPOSITE UTILITY PLAN - TULARE ST
UT-C4060	PACKAGE 1B - UTILITIES - COMPOSITE UTILITY PLAN - VENTURA ST
UT-B0008	PACKAGE 1B - UTILITIES - GRADING AND DRAINAGE PLAN - KEY MAP
CV-G1015	PACKAGE 1B - UTILITIES - GRADING AND DRAINAGE PLAN - STA. 10946+00 TO STA. 10974+00
CV-G1016	PACKAGE 1B - UTILITIES - GRADING AND DRAINAGE PLAN - STA. 10974+00 TO STA. 11002+00
CV-G1017	PACKAGE 1B - UTILITIES - GRADING AND DRAINAGE PLAN - STA. 11002+00 TO STA. 11030+00

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY R. DEASON
DRAWN BY P. BARBER
CHECKED BY A. BRUNDAGE
IN CHARGE Q. EARLE
DATE 3/01/12

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CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
GENERAL  
INDEX OF DRAWINGS

CONTRACT NO.
DRAWING NO. GE-A0013
SCALE NO SCALE
SHEET NO.

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GENERAL NOTES:

1. ALL MATERIAL AND WORK TO BE CONSTRUCTED AS SHOWN HERE ON THESE PLANS SHALL CONFORM TO THE LATEST EDITION OF THE STANDARD SPECIFICATIONS AND DETAILS OF THE CITY OF FRESNO, FRESNO METROPOLITAN FLOOD CONTROL DISTRICT (FMFCD), FRESNO IRRIGATION DISTRICT (FID), AND THE LATEST EDITION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND PLANS.
2. CONTRACTOR SHALL FOLLOW THE PROJECT REQUIREMENTS CONTAINED IN THE SPECIFICATIONS AND PROJECT SPECIAL PROVISIONS. CONTRACTOR SHALL MAINTAIN A COPY OF THE SPECIFICATIONS AND APPROVED PROJECT PLANS AND SPECIAL PROVISIONS AT THE JOB SITE AT ALL TIMES.
3. CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY FROM APPLICABLE AGENCIES TO PERFORM THE WORK SHOWN ON THESE PLANS PRIOR TO COMMENCING WORK.
4. CONTRACTOR SHALL NOTIFY THE CITY OF FRESNO, FMFCD, FID, PG&E, AT&T AND OTHER UTILITY ENTITIES AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO COMMENCEMENT OF PARTICULAR WORK RELATIVE TO THE UTILITY AGENCY HAVING JURISDICTION.
5. CONTRACTOR SHALL INFORM THE UTILITY AGENCY HAVING JURISDICTION AT LEAST THREE (3) WORKING DAYS PRIOR TO WHEN WORK REQUIRING SPECIAL INSPECTION IS AVAILABLE FOR INSPECTION. ALL WORK PERFORMED WITHOUT REQUIRED INSPECTION OR NOTIFICATION IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE DIRECTION OF THE AUTHORITY AT THE CONTRACTOR’S EXPENSE WITH NO IMPACT TO THE PROJECT SCHEDULE.
6. CONTRACTOR SHALL COORDINATE ALL NECESSARY UTILITY RELOCATIONS, OR ANY WORK INVOLVING UTILITIES, WITH THE APPROPRIATE UTILITY AGENCIES.
7. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) AT 811 AT LEAST TEN (10) DAYS PRIOR TO START OF CONSTRUCTION AND AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO THE START OF ANY EXCAVATION.
8. EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATION BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS HAVE NOT BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATIONS AND DEPTHS OF ANY UNDERGROUND UTILITIES OR STRUCTURES WITHIN THE LIMITS OF THE PROJECT. IT SHALL BE THE CONTRACTOR’S RESPONSABILITY TO LOCATE, PROTECT AND MAINTAIN ALL EXISTING UTILITIES WITHIN THE LIMITS OF THE PROJECT. ANY ADDITIONAL COSTS INCURRED AS A RESULTS OF CONTRACTOR’S FAILURE TO VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION SHALL BE BORNE BY THE CONTRACTOR.
9. CONTRACTOR SHALL PROVIDE 24 HOUR EMERGENCY TELEPHONE NUMBERS TO THE CITY OF FRESNO POLICE DEPARTMENT, FIRE DEPARTMENT AND THE CITY ENGINEER AND NOTIFY THEM OF ANY LANE CLOSURES OR DETOURS. DETOURS SHALL NOT BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL BY THE CITY ENGINEER.
10. CONTRACTOR SHALL PROVIDE AND MAINTAIN SUFFICIENT SAFETY DEVICES INCLUDING BARRICADES, FENCING, WARNING SIGNS, LIGHTS OR FLAGGERS TO PROVIDE FOR THE SAFETY OF THE GENERAL PUBLIC WITHIN THE PROJECT AREA, TO THE SATISFACTION OF THE CITY ENGINEER. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
11. CONTRACTOR SHALL PROVIDE ONE (1) COMPLETE SET OF AS-BUILT DRAWINGS WITH CHANGES INDICATED IN RED INK ON FULL-SIZE DRAWINGS. AS-BUILTS SHALL BE DELIVERED TO THE AUTHORITY’S REPRESENTATIVE AT THE COMPLETION OF WORK PRIOR TO FINAL PROGRESS PAYMENT.
12. THE CONTRACTOR SHALL BE REQUIRED TO KEEP ALL CONSTRUCTION ACTIVITIES WITHIN THE PUBLIC RIGHT-OF-WAY AND EASEMENT OBTAINED FOR THE PROJECT UNLESS OTHERWISE SHOWN. THIS SHALL INCLUDE, BUT NOT LIMITED TO: VEHICLES AND EQUIPMENT, LIMITS OF TRENCH EXCAVATIONS, STOCKPILED NEW MATERIAL, EXCAVATED MATERIAL AND BACKFILL MATERIAL.

13. CONTRACTOR SHALL RESTORE ALL EXISTING PRIVATE AND PUBLIC IMPROVEMENTS TO THEIR EXISTING CONDITION OR BETTER TO THE SATISFACTION OF THE CITY ENGINEER INCLUDING, BUT NOT LIMITED TO: LANDSCAPING, IRRIGATION, DRIVEWAYS, AC PAVING, CONCRETE AND UTILITIES.
14. CONTRACTOR SHALL PROTECT ALL SURVEY MONUMENTS AND BENCHMARKS WITHIN THE WORK AREA. ANY PERMANENT SURVEY MONUMENTS OR MARKERS DESTROYED BY THE CONTRACTOR’S OPERATIONS SHALL BE REPLACED BY A LICENSED LAND SURVEYOR AT THE CONTRACTOR’S EXPENSE.
15. ALL CONSTRUCTION CONTROL REQUIRED FOR CONSTRUCTION ACTIVITIES SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD). ALL PROPOSED LANE CLOSURES AND DETOURS REQUIRE A TRAFFIC CONTROL PLAN TO BE SUBMITTED FOR REVIEW AND APPROVAL BY THE AUTHORITY REPRESENTATIVE AND THE CITY ENGINEER OF THE CITY OF FRESNO AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE SCHEDULED CLOSURE.
16. CONTRACTOR SHALL MAINTAIN ACCESS TO PRIVATE PROPERTY AND DRIVEWAYS, OR PROVIDE ALTERNATE/TEMPORARY ACCESS, AT ALL TIMES.
17. ALL TREES WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE PROTECTED FROM CONSTRUCTION DAMAGE, UNLESS OTHERWISE IDENTIFIED FOR REMOVAL ON PLANS.
18. CONSTRUCTION ACTIVITIES AFFECTING SERVICE TO ANY FIRE HYDRANT SHALL BE COORDINATED WITH THE CITY OF FRESNO FIRE DEPARTMENT A MINIMUM OF SEVENTY-TWO (72) HOURS PRIOR TO STARTING WORK.
19. CONTRACTOR SHALL CONFORM TO EXISTING STREETS, LANDSCAPE AND OTHER IMPROVEMENTS WITH A SMOOTH TRANSITION AND CONFORM IN PAVING, CURBS, GUTTERS AND SIDEWALK TO AVOID ANY ABRUPT CHANGES IN GRADES OR CROSS SLOPES, LOW SPOTS, OR HAZARDOUS CONDITIONS.
20. CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS AND ELEVATIONS SHOWN ON THE PLANS AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR POTENTIAL FIELD CONFLICTS PRIOR TO PROCEEDING WITH THE WORK. ANY COSTS RESULTING FROM THE CONTRACTOR’S FAILURE TO REPORT SUCH CONFLICTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
21. CONTRACTOR SHALL CONDUCT GRADING AND CONSTRUCTION ACTIVITIES IN SUCH A MANNER TO CONTROL AIRBORNE DUST AND RELATED DAMAGE TO ADJACENT PROPERTIES. SUFFICIENT WATERING TO CONTROL DUST AND WIND BLOWN MATERIAL IS REQUIRED AT ALL TIMES AND CONTRACTORS ASSUMES FULL LIABILITY FOR DAMAGE CLAIMS RELATING TO DUST.
22. ANY MATERIAL CONTAINING ASBESTOS OR OTHER HAZARDOUS MATERIAL THAT ARE REMOVED FROM THE PROJECT SITE MUST BE PERFORMED ONLY BY A PRE-APPROVED STATE OF CALIFORNIA LICENSED ASBESTOS ABATEMENT CONTRACTOR REGISTERED WITH CAL-OSHA. ASBESTOS AND OTHER HAZARDOUS MATERIAL HANDLING MUST BE IN ACCORDANCE WITH CAL-OSHA, FED-OSHA, U.S. EPA, AND CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCE CONTROL.

SPECIAL NOTE FOR UTILITY DATA:

THE LOCATION OF EXISTING UTILITIES ARE BASED ON TWO SOURCES:  
1.) TOPOGRAPHIC SURVEY  
2.) G.I.S.  
THE CONTRACTOR SHALL CONDUCT HIS/HER OWN SURVEY AND VERIFY THE LOCATION OF EXISTING UTILITIES AND RECONCILE THE SURVEY DATA AND GIS DATA.

SPECIAL NOTE FOR FUTURE STORM DRAIN LINES:

ALL FUTURE SD LINES ANNOTATED AS ‘FUTURE (BY OTHERS)’ ARE NOT IN CONTRACT AND ARE SHOWN FOR INFORMATION ONLY. COORDINATE WITH FMFCD FOR FUTURE SD LINES CROSSING THE HST ROW AND PROVIDE CASING FOR FUTURE SD LINES. CASING INVERT ELEVATIONS AND SLOPES SHALL BE DETERMINED BY FMFCD.

SPECIAL NOTES FOR WATER AND SEWER:

1. CONTRACTOR SHALL LOCATE, PROTECT AND RECONNECT ALL EXISTING WATER AND SEWER SERVICE LATERALS TO NEW WATER AND SEWER MAINS.
2. CONTRACTOR SHALL RELOCATE EXISTING WATER METERS TO EDGE OF NEW ROADWAYS IN ACCORDANCE WITH CITY OF FRESNO WATER STANDARD DRAWINGS.
3. WATER MAIN HUNG ON OR SUPPORTED BY BRIDGE STRUCTURES SHALL BE CIP.

APPLICABLE STANDARD PLANS

CITY OF FRESNO STANDARD DRAWINGS:



- PUBLIC WORKS STANDARD DRAWINGS
- WATER STANDARD DRAWINGS
- SEWER STANDARD DRAWINGS
- ELECTRICAL STANDARD DRAWINGS
- ALTERNATE PUBLIC IMPROVEMENT DRAWINGS
- INTELLIGENT TRANSPORTATION SYSTEM STANDARD DRAWINGS

FRESNO METROPOLITAN FLOOD CONTROL DISTRICT STANDARD DRAWINGS:

- A-1 THRU A-9
- B-1 THRU B-7
- C-1
- D-1 THRU D-9
- E-1 THRU E-8
- F-1 THRU F-4
- G-1 THRU G-10

FRESNO IRRIGATION DISTRICT ENGINEERING HANDBOOK OF SPECIFICATIONS AND DRAWINGS:

PAGES 12 THRU 59

						DESIGNED BY C. ALLEN	<b>PROPOSED PRELIMINARY DESIGN</b>			<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT SIERRA SUBDIVISION</b>  PACKAGE 1B UTILITIES COMPOSITE UTILITY PLAN GENERAL NOTES	CONTRACT NO.
						DRAWN BY C. DOEHNE					DRAWING NO. UT-B0005
						CHECKED BY M. POLISCHUK					SCALE NO SCALE
						IN CHARGE J. LABANOWSKI					SHEET NO.
REV	DATE	BY	CHK	APP	DESCRIPTION	DATE 12/08/11	<b>NOT FOR CONSTRUCTION</b>				

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LEGENDS AND SYMBOLS

EXISTING	NEW	DESCRIPTION
		ELECTRICAL OVERHEAD LINE
		ELECTRICAL UNDERGROUND LINE
		NATURAL GAS LINE
		IRRIGATION LINE
		OIL LINE
		STORM DRAIN LINE
		SEWER LINE
		TELECOMMUNICATION OVERHEAD LINE
		TELECOMMUNICATION LINE
		WATER LINE
		TELEPHONE LINE
		TELEVISION OVERHEAD LINE
		TELEVISION LINE
		FIBER OPTIC LINE
		SEWER MANHOLE
		STORM DRAIN MANHOLE
		FIRE HYDRANT
		NORTH ARROW
		RIGHT-OF-WAY
		HST TRACK CENTER LINE
		UTILITY TO BE REMOVED OR RELOCATED

ABBREVIATIONS

AB	AGGREGATE BASE	IN	INCH
AC	ASPHALT CONCRETE	INV	INVERT
ACB	ASPHALT CONCRETE BASE	IRR	IRRIGATION
ACP	ASBESTOS CEMENT PIPE		
A/G	AT GRADE	L	LENGTH
ABN	ABANDON	LED	LIGHT EMITTING DIODE
APPROX	APPROXIMATE	LG	LIP OF GUTTER
AVE	AVENUE	LS	LANDSCAPE
		LT	LEFT
BEG	BEGIN	MIN	MINIMUM
BLDG	BUILDING		
BLVD	BOULEVARD		
BCR	BEGIN CURVE RETURN	N	NORTH, NORTHING, NEW
B.O.	BLOW-OFF	NIC, N.I.C.	NOT IN CONTRACT
BOC	BACK OF CURB	NO	NUMBER
BSW	BACK OF SIDEWALK	N.T.S.	NOT TO SCALE
BVCE	BEGIN VERTICAL CURVE ELEVATION		
BVCS	BEGIN VERTICAL CURVE STATION	PVMT	PAVEMENT
		(P)	PROPOSED
C&G	CURB AND GUTTER	PCC	PORTLAND CEMENT CONCRETE
CB	CATCH BASIN	PRKG	PARKING
CD	CURB DRAIN	PVC	POLYVINYL CHLORIDE
CH	CURB HEIGHT		
CIP	CAST IRON PIPE	R	RADIUS
CL	CENTERLINE	R/R	REMOVE AND REPLACE/RELOCATE
CMP	CORRUGATED METAL PIPE	R/W, ROW	RIGHT OF WAY
COF	CITY OF FRESNO	RCP	REINFORCED CONCRETE PIPE
CTV	CABLE TELEVISION	RT	RIGHT
CV	CURVE	REQ'D	REQUIRED
D	DEPTH		
DIA	DIAMETER	S	SLOPE, SOUTH, SEWER
DI	DRAINAGE INLET	SD	STORM DRAIN
DIP	DUCTILE IRON PIPE	SDI	STORM DRAIN INLET
DWG	DRAWING	SDMH	STORM DRAIN MANHOLE
		SF	SQUARE FEET
E	ELECTRICAL, ELECTRIC	SHLD	SHOULDER
E	EAST, EXISTING	SR	STATE ROUTE
ELEC	ELECTRICAL, ELECTRIC	SSMH	SANITARY SEWER MANHOLE
EC	END HORIZONTAL CURVE	SS	SANITARY SEWER
EDG	EDGE	STA	STATION
EL OR ELEV	ELEVATION	ST	STREET
ELEC OH	ELECTRICAL OVERHEAD	SW	SIDEWALK
ELL	ELBOW		
EP, EOP	EDGE OF PAVEMENT	T	TELEPHONE, TOTAL
ETW	EDGE OF TRAVEL WAY	TC	TELECOMMUNICATION
EVCE	END OF VERTICAL CURVE ELEVATION	TCE	TEMPORARY CONSTRUCTION EASEMENT
EVCS	END OF VERTICAL CURVE STATION	TEL	TELEPHONE
EXIST, EX, (E)	EXISTING	TOC	TOP OF CURB
		TS	TRAFFIC SIGNAL
FDAC	FULL DEPTH ASPHALT CONCRETE	TYP	TYPICAL
FH	FIRE HYDRANT		
FID	FRESNO IRRIGATION DISTRICT	UG, U/G	UNDERGROUND
FMFCD	FRESNO METROPOLITAN FLOOD CONTROL DISTRICT		
F.O.	FIBER OPTIC	VAR	VARIES
FOC	FACE OF CURB	VC	VERTICAL CURVE
FUT	FUTURE	VCP	VITRIFIED CLAY PIPE
G	GAS	W	WATER, WEST
GALV	GALVANIZED	W/	WITH
GB	GRADE BREAK	WM	WATER MAIN
GND	GROUND	WV	WATER VALVE
GSB	GOLDEN STATE BLVD		
GTR	GUTTER		
GV	GAS VALVE		
HOR	HORIZONTAL		

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY C. ALLEN
DRAWN BY C. DOEHNE
CHECKED BY M. POLISCHUK
IN CHARGE J. LABANOWSKI
DATE 12/08/11

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CONSTRUCTION



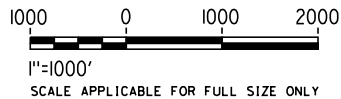
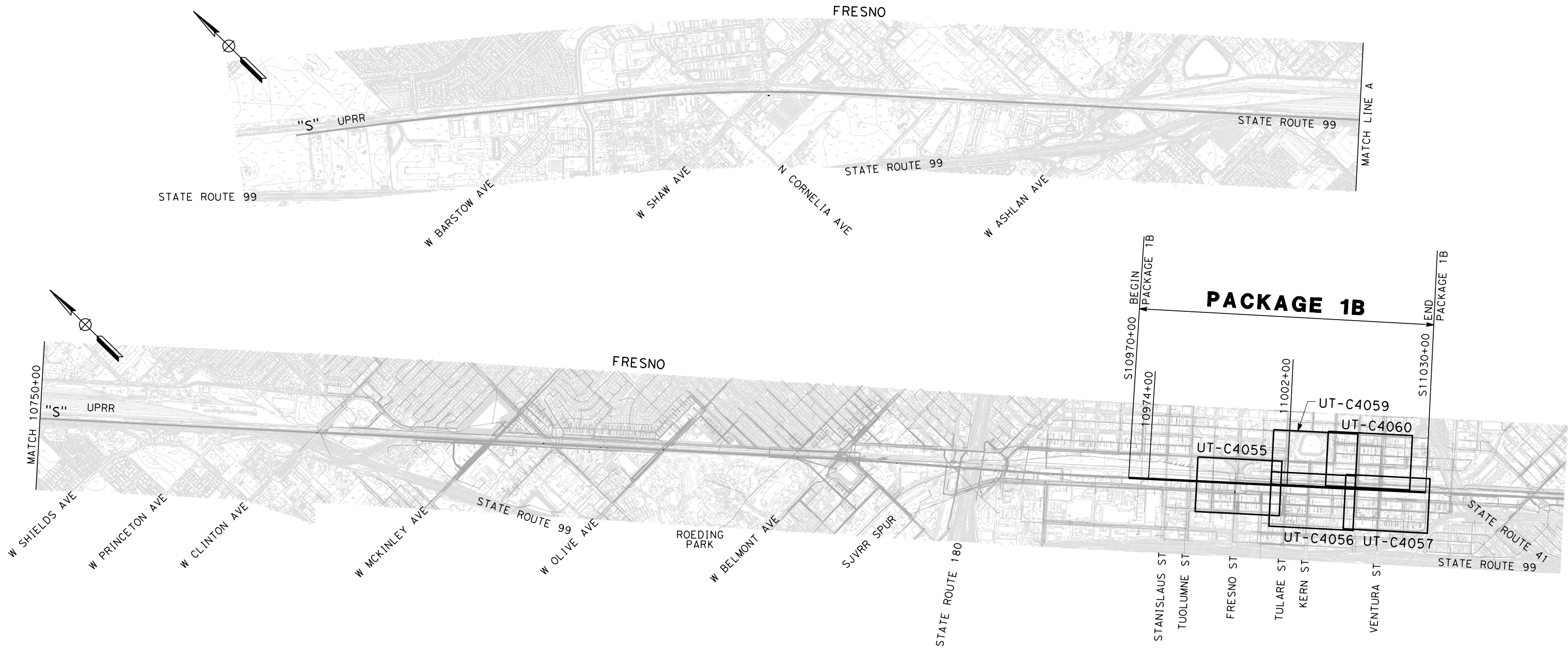
CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
UTILITIES  
COMPOSITE UTILITY PLAN  
LEGEND, SYMBOLS & ABBREVIATIONS

CONTRACT NO.
DRAWING NO. UT-B0006
SCALE NO SCALE
SHEET NO.



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY C. ALLEN
DRAWN BY P.A. TONKIN
CHECKED BY J. LABANOWSKI
IN CHARGE R. PRUST
DATE 3/01/12

**PROPOSED  
PRELIMINARY  
DESIGN**

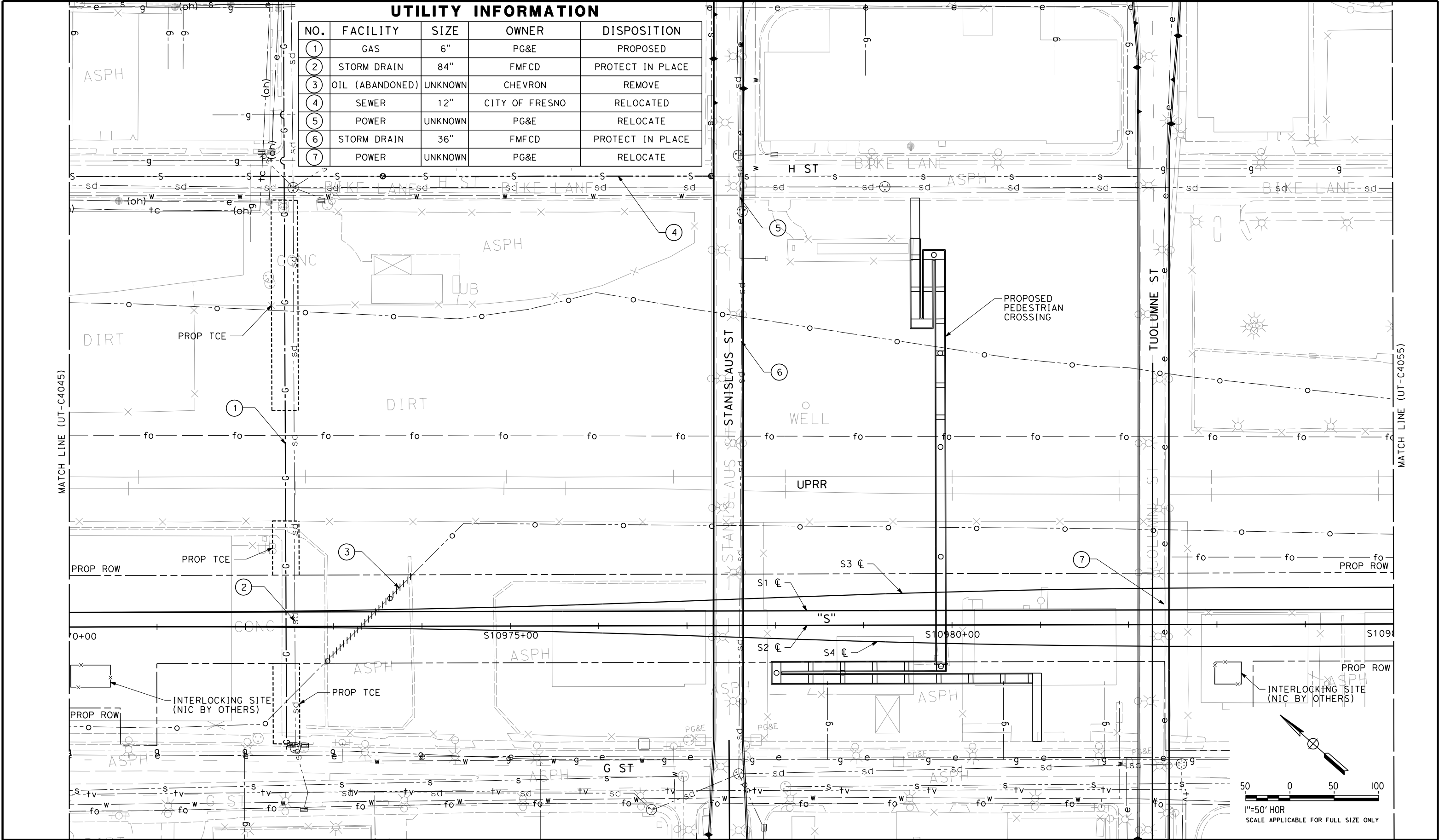
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
UTILITIES  
COMPOSITE UTILITY  
KEY MAP**

CONTRACT NO.
DRAWING NO. UT-B0007
SCALE AS SHOWN
SHEET NO.

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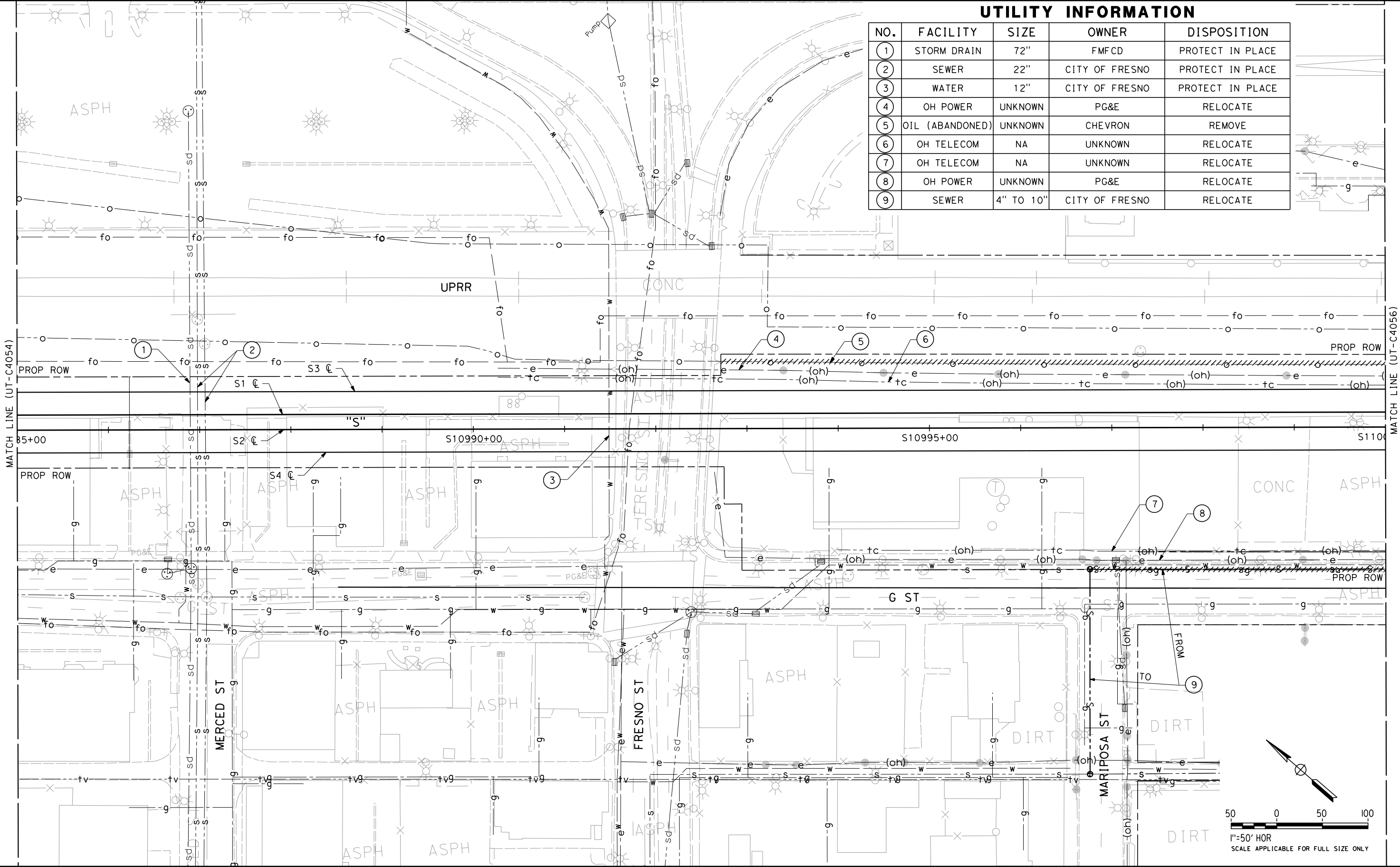
<div>DESIGNED BY C. ALLEN</div> <div>DRAWN BY J. HAROLD</div> <div>CHECKED BY M. POLISCHUK</div> <div>IN CHARGE J. LABANOWSKI</div> <div>DATE 12/08/11</div>					<div>PROPOSED PRELIMINARY DESIGN</div> <div>NOT FOR CONSTRUCTION</div>		<div>URS   HMM   ARUP</div> <div>CALIFORNIA HIGH-SPEED TRAIN</div> <div></div> <div>CALIFORNIA HIGH-SPEED RAIL AUTHORITY</div>		<div>CALIFORNIA HIGH-SPEED TRAIN PROJECT</div> <div>SIERRA SUBDIVISION</div> <div>PACKAGE 1B</div> <div>UTILITIES</div> <div>COMPOSITE UTILITY PLAN</div> <div>STA. 10970+00 TO STA. 10985+00</div>		<div>CONTRACT NO.</div> <div>DRAWING NO. UT-C4054</div> <div>SCALE AS SHOWN</div> <div>SHEET NO.</div>	
REV	DATE	BY	CHK	APP	DESCRIPTION							



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UTILITY INFORMATION

NO.	FACILITY	SIZE	OWNER	DISPOSITION
1	STORM DRAIN	72"	FMFCD	PROTECT IN PLACE
2	SEWER	22"	CITY OF FRESNO	PROTECT IN PLACE
3	WATER	12"	CITY OF FRESNO	PROTECT IN PLACE
4	OH POWER	UNKNOWN	PG&E	RELOCATE
5	OIL (ABANDONED)	UNKNOWN	CHEVRON	REMOVE
6	OH TELECOM	NA	UNKNOWN	RELOCATE
7	OH TELECOM	NA	UNKNOWN	RELOCATE
8	OH POWER	UNKNOWN	PG&E	RELOCATE
9	SEWER	4" TO 10"	CITY OF FRESNO	RELOCATE



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY C. ALLEN
DRAWN BY J. HAROLD
CHECKED BY M. POLISCHUK
IN CHARGE J. LABANOWSKI
DATE 3/01/12

**PROPOSED  
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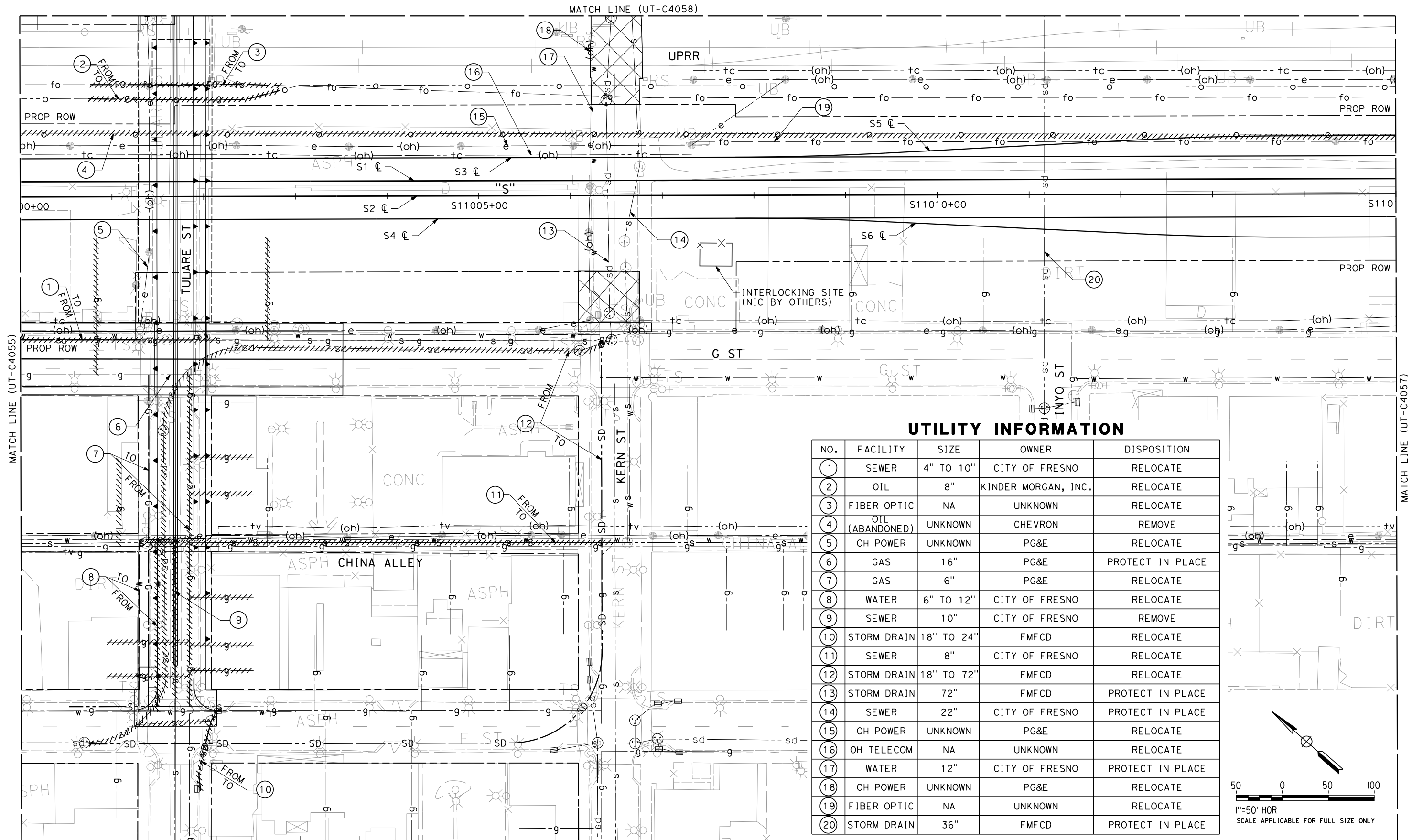


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION**

PACKAGE 1B  
UTILITIES  
COMPOSITE UTILITY PLAN  
STA. 10985+00 TO STA. 11000+00

CONTRACT NO.
DRAWING NO. UT-C4055
SCALE AS SHOWN
SHEET NO.

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
C. ALLEN  
DRAWN BY  
J. HAROLD  
CHECKED BY  
M. POLISCHUK  
IN CHARGE  
J. LABANOWSKI  
DATE  
3/01/12

**PROPOSED  
PRELIMINARY  
DESIGN**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION**

PACKAGE 1B  
UTILITIES  
COMPOSITE UTILITY PLAN  
STA. 11000+00 TO STA. 11015+00

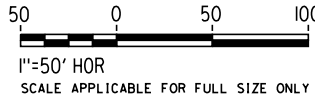
CONTRACT NO.

DRAWING NO.  
UT-C4056

SCALE  
AS SHOWN

SHEET NO.





NO.	FACILITY	SIZE	OWNER	DISPOSITION
1	GAS	4"	PG&E	PROPOSED
2	OH POWER	UNKNOWN	PG&E	RELOCATE
3	SEWER	10"	CITY OF FRESNO	PROTECT IN PLACE
4	FIBER OPTIC	NA	UNKNOWN	RELOCATE
5	OH TELEVISION	NA	UNKNOWN	RELOCATE
6	GAS	6"	PG&E	PROTECT IN PLACE
7	WATER	12"	CITY OF FRESNO	RELOCATE
8	SEWER	18"	CITY OF FRESNO	RELOCATE
9	GAS	4"	PG&E	REMOVE
10	OH TELECOM	NA	UNKNOWN	RELOCATE
11	OH POWER	UNKNOWN	PG&E	RELOCATE
12	OIL (ABANDONED)	UNKNOWN	CHEVRON	REMOVE
13	OH TELECOM	NA	UNKNOWN	RELOCATE
14	SEWER	10"	CITY OF FRESNO	RELOCATE
15	STORM DRAIN	18"	FMFCD	FUTURE (BY OTHERS)
16	GAS	18"	PG&E	RELOCATE
17	OH TELECOM	NA	UNKNOWN	RELOCATE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY C. ALLEN
DRAWN BY J. HAROLD
CHECKED BY M. POLISCHUK
IN CHARGE J. LABANOWSKI
DATE 3/01/12

**PROPOSED  
PRELIMINARY  
DESIGN**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

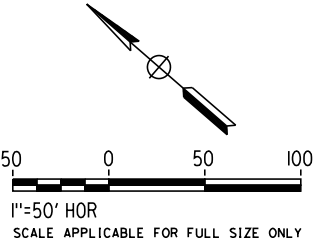
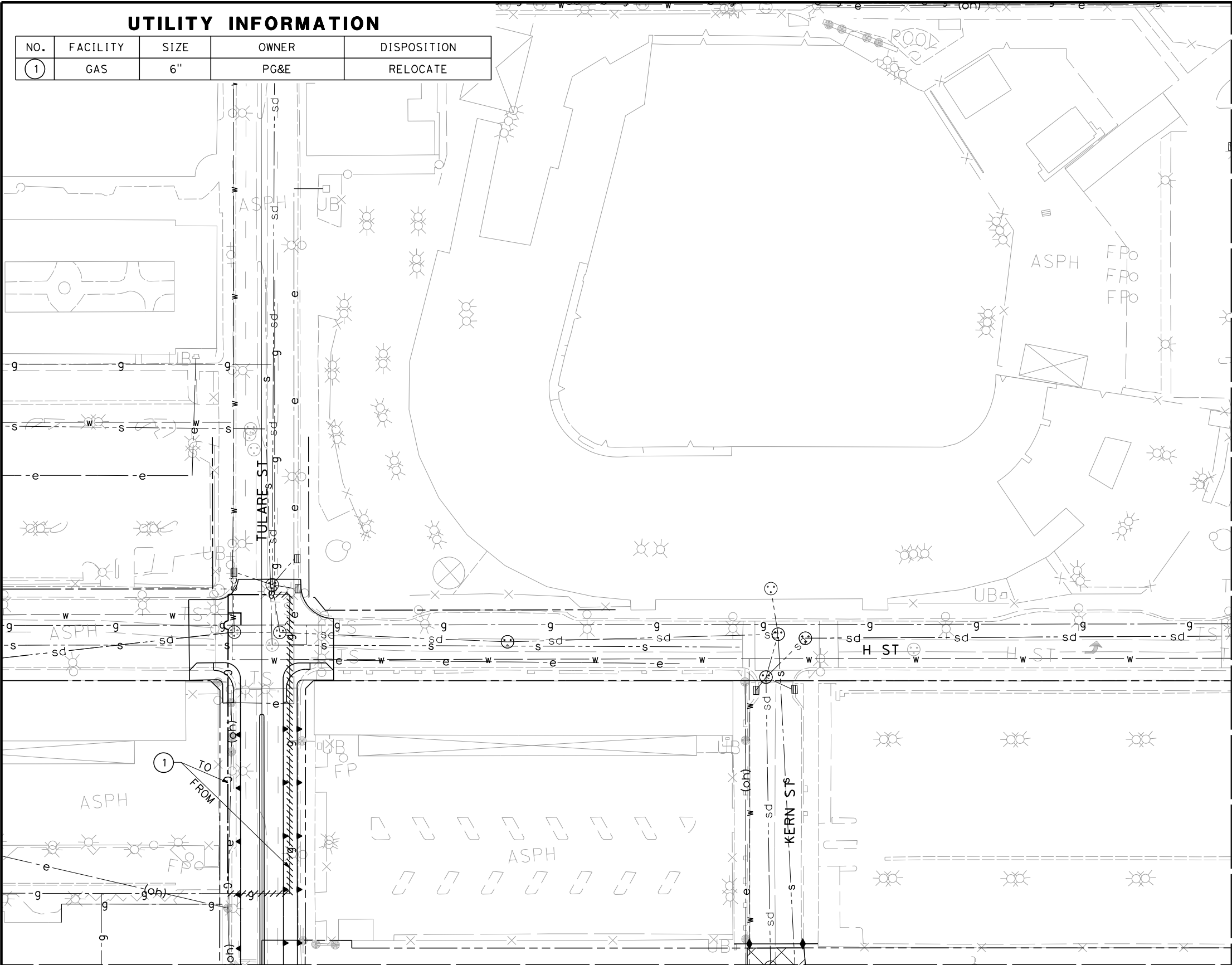
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION**  
PACKAGE 1B  
UTILITIES  
COMPOSITE UTILITY PLAN  
STA. 11015+00 TO STA. 11030+00

CONTRACT NO.	
DRAWING NO.	UT-C4057
SCALE	AS SHOWN
SHEET NO.	

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UTILITY INFORMATION

NO.	FACILITY	SIZE	OWNER	DISPOSITION
①	GAS	6"	PG&E	RELOCATE



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY C. ALLEN
DRAWN BY J. HAROLD
CHECKED BY M. POLISCHUK
IN CHARGE J. LABANOWSKI
DATE 3/01/12

PROPOSED  
PRELIMINARY  
DESIGN  
  
NOT FOR  
CONSTRUCTION



CALIFORNIA  
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION  
PACKAGE 1B  
UTILITIES  
COMPOSITE UTILITY PLAN  
TULARE ST

CONTRACT NO.
DRAWING NO. UT-C4058
SCALE AS SHOWN
SHEET NO.

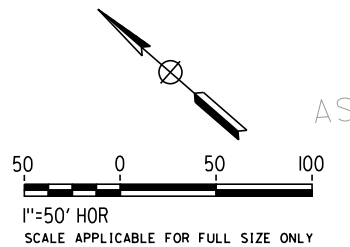
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MATCH LINE (UT-C4058)

### UTILITY INFORMATION

NO.	FACILITY	SIZE	OWNER	DISPOSITION
1	STORM DRAIN	18"	FMFCD	RELOCATE
2	STORM DRAIN	18"	FMFCD	RELOCATE
3	OH POWER	UNKNOWN	PG&E	RELOCATE
4	STORM DRAIN	15"	FMFCD	REMOVE
5	GAS	6"	PG&E	PROTECT IN PLACE
6	WATER	8"	CITY OF FRESNO	RELOCATE
7	OH POWER	UNKNOWN	PG&E	RELOCATE
8	OH TELEVISION	NA	UNKNOWN	RELOCATE
9	WATER	12"	CITY OF FRESNO	RELOCATE
10	SEWER	18"	CITY OF FRESNO	RELOCATE
11	OH POWER	UNKNOWN	PG&E	RELOCATE
12	SEWER	18"	CITY OF FRESNO	RELOCATE
13	GAS	8"	PG&E	PROTECT IN PLACE

MATCH LINE (UT-C4057)



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY C. ALLEN
DRAWN BY J. HAROLD
CHECKED BY M. POLISCHUK
IN CHARGE J. LABANOWSKI
DATE 3/01/12

**PROPOSED  
PRELIMINARY  
DESIGN**

**NOT FOR  
CONSTRUCTION**



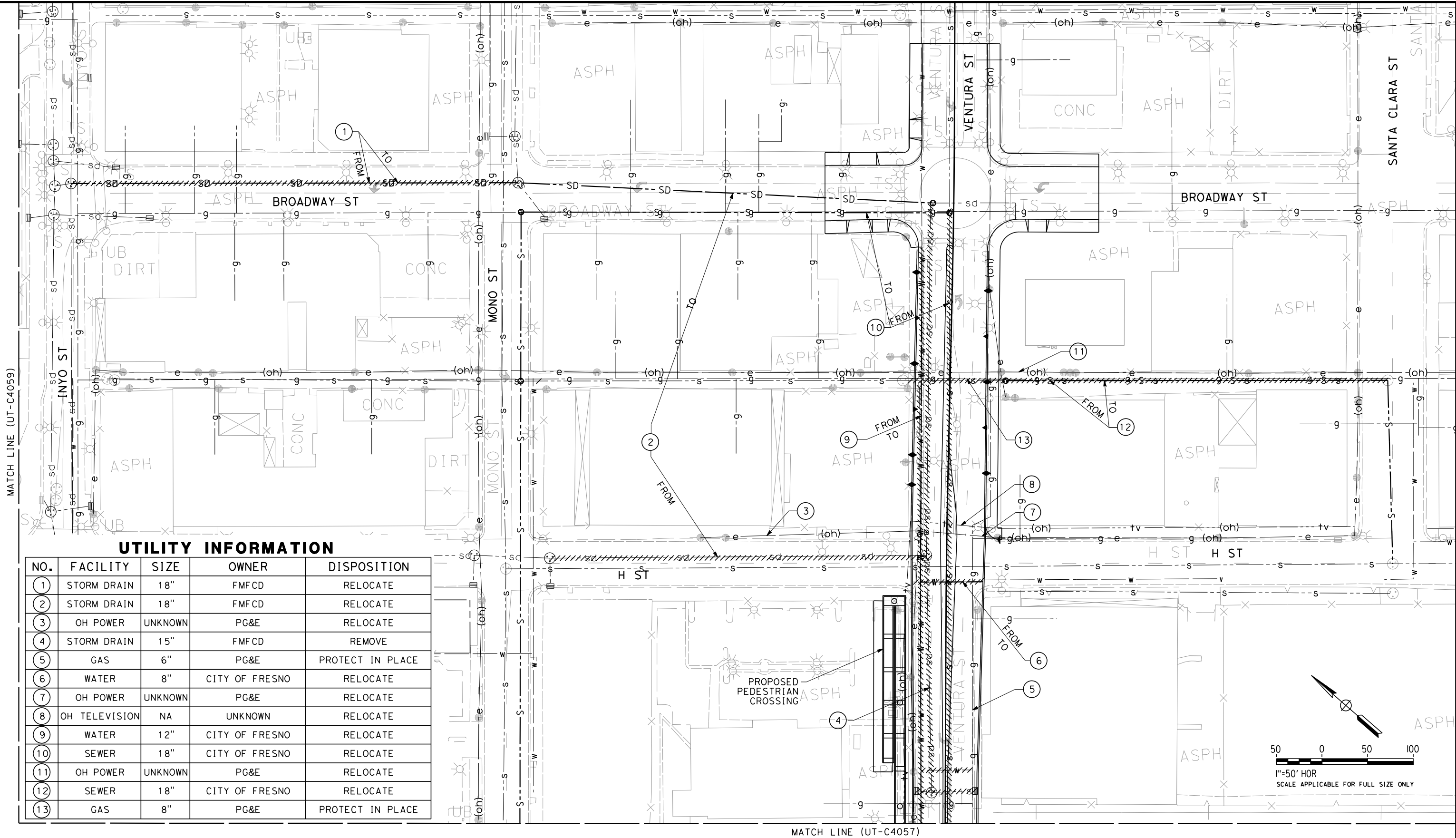
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION**

PACKAGE 1B  
UTILITIES  
COMPOSITE UTILITY PLAN  
VENTURA ST

CONTRACT NO.
DRAWING NO. UT-C4059
SCALE AS SHOWN
SHEET NO.



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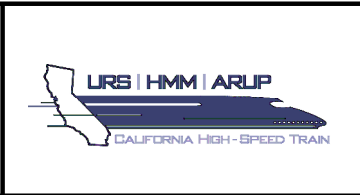


REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY C. ALLEN
DRAWN BY J. HAROLD
CHECKED BY M. POLISCHUK
IN CHARGE J. LABANOWSKI
DATE 2/17/12

PROPOSED  
PRELIMINARY  
DESIGN

NOT FOR  
CONSTRUCTION



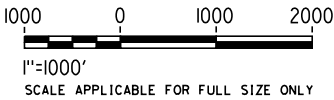
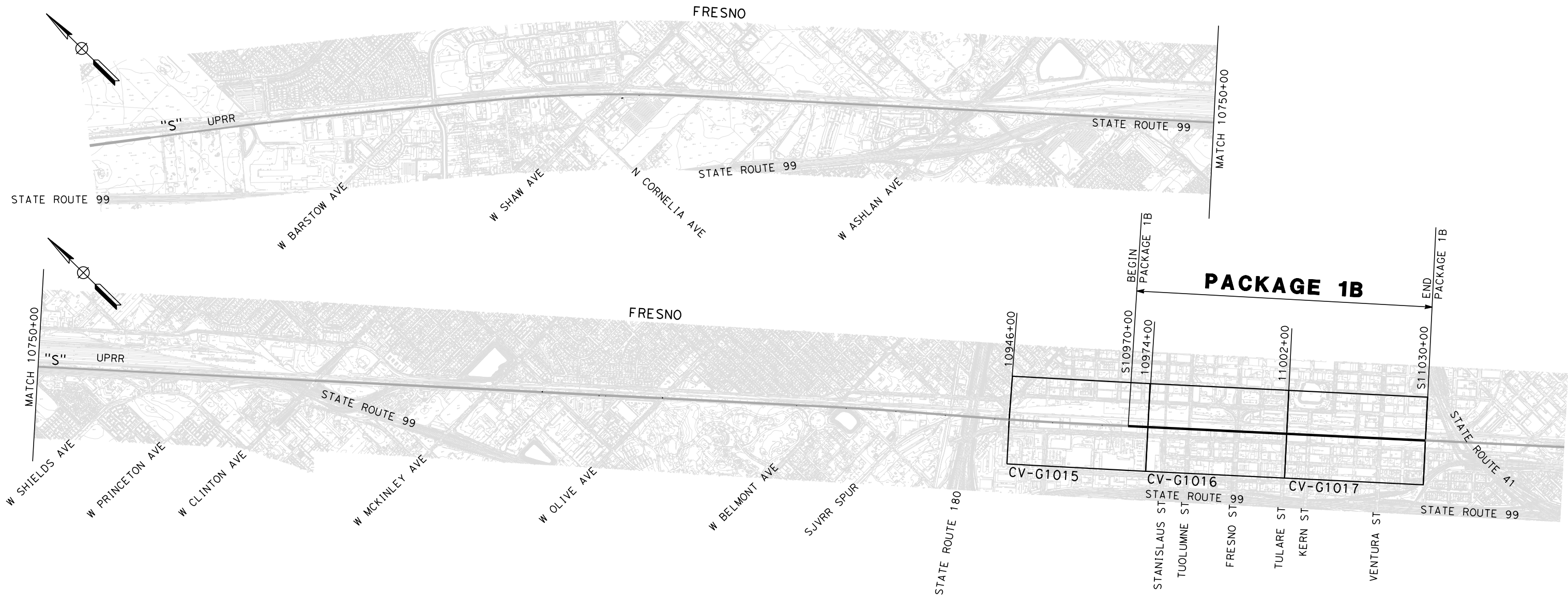
CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION

PACKAGE 1B  
UTILITIES  
COMPOSITE UTILITY PLAN  
VENTURA ST

CONTRACT NO.
DRAWING NO. UT-C4060
SCALE AS SHOWN
SHEET NO.



paul.tonkin 2/28/2012 5:10:52 PM CAHSR-r1.tbl PDF\_half\_black\_200dpi.plt\\global\\americas\\Jobs\\S-F\\131000\\131577\\4 Internal Project Data\\4-03 Drawings\\4-03-03 30% Design\\4-03-03-05 Design Sheets\\Drainage



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY G. SCHLERETH
DRAWN BY P.A. TONKIN
CHECKED BY S. BURGESS
IN CHARGE R. COFFIN
DATE 3/01/12

**PROPOSED  
PRELIMINARY  
DESIGN**

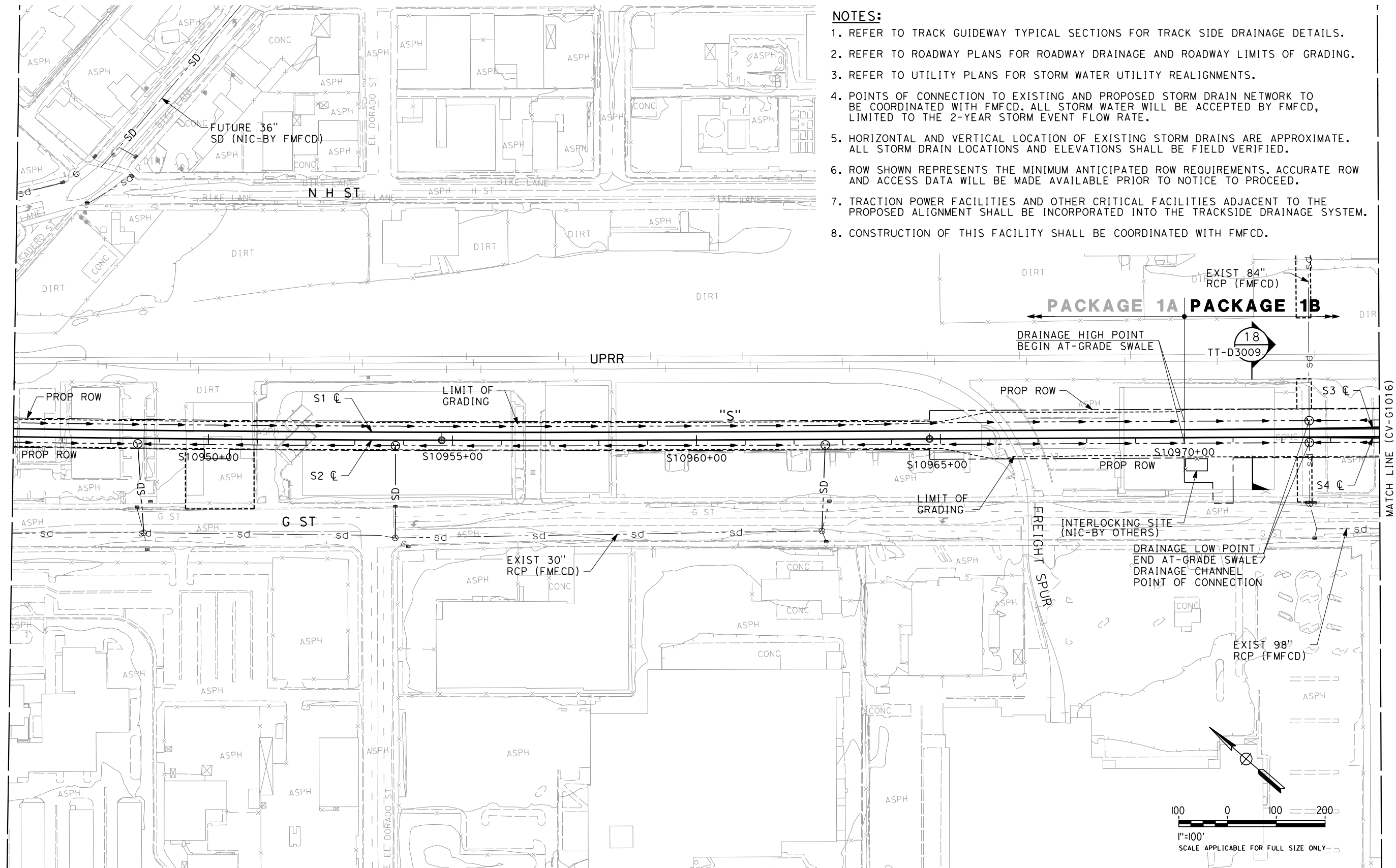
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**SIERRA SUBDIVISION**  
PACKAGE 1B  
UTILITIES  
GRADING AND DRAINAGE  
KEY MAP

CONTRACT NO.
DRAWING NO. CV-B0008
SCALE AS SHOWN
SHEET NO.

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY G. SCHLERETH
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BURGESS
IN CHARGE R. COFFIN
DATE 02/17/12

<b>PROPOSED PRELIMINARY DESIGN</b>
<b>NOT FOR CONSTRUCTION</b>

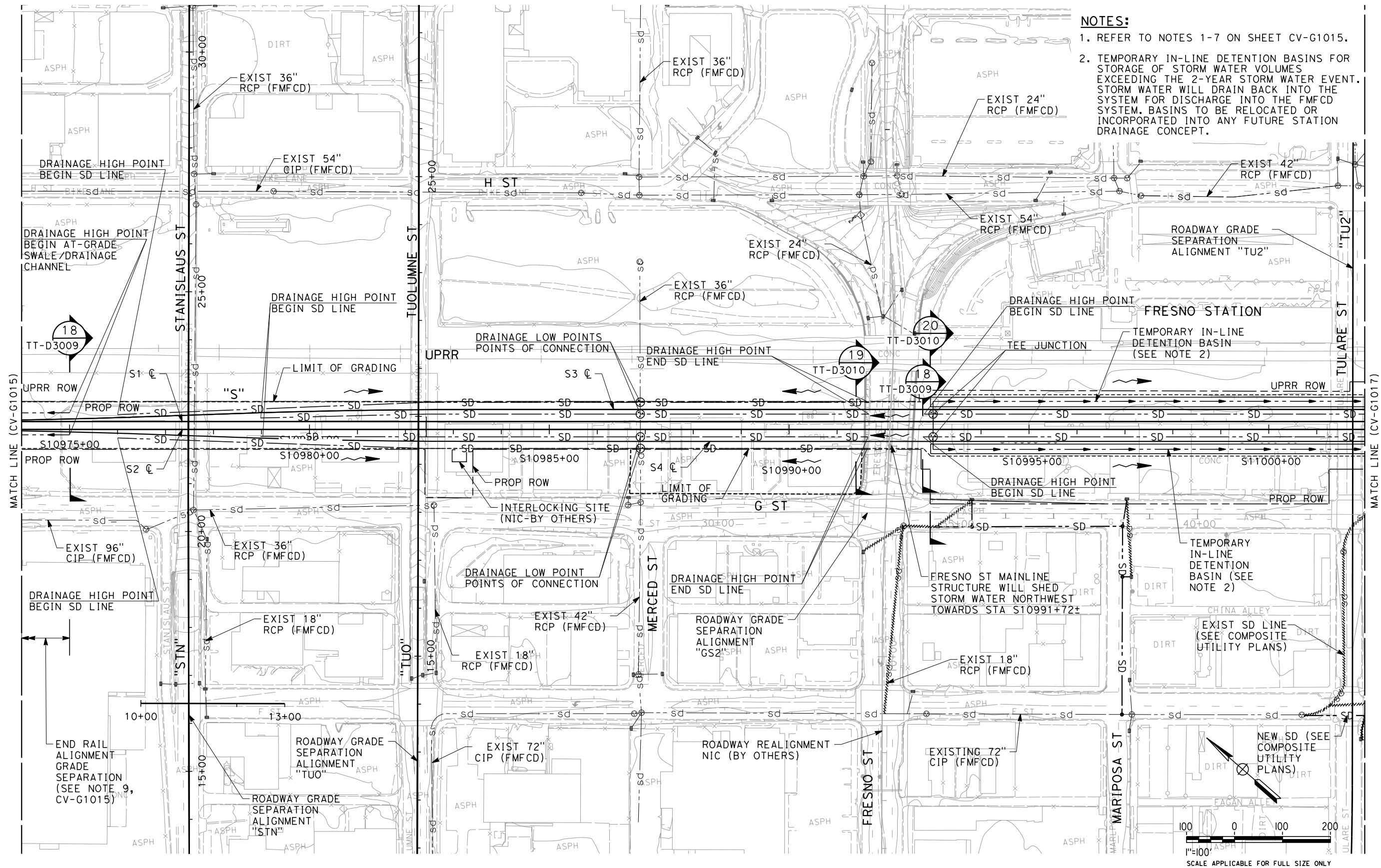


<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT SIERRA SUBDIVISION PACKAGE 1B UTILITIES GRADING AND DRAINAGE PLAN STA. 10946+00 TO STA. 10974+00</b>
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CONTRACT NO.
DRAWING NO. CV-G1015
SCALE AS SHOWN
SHEET NO.



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY G. SCHLERETH
DRAWN BY E. SUDHAUSEN
CHECKED BY S. BURGESS
IN CHARGE R. COFFIN
DATE 3/01/12

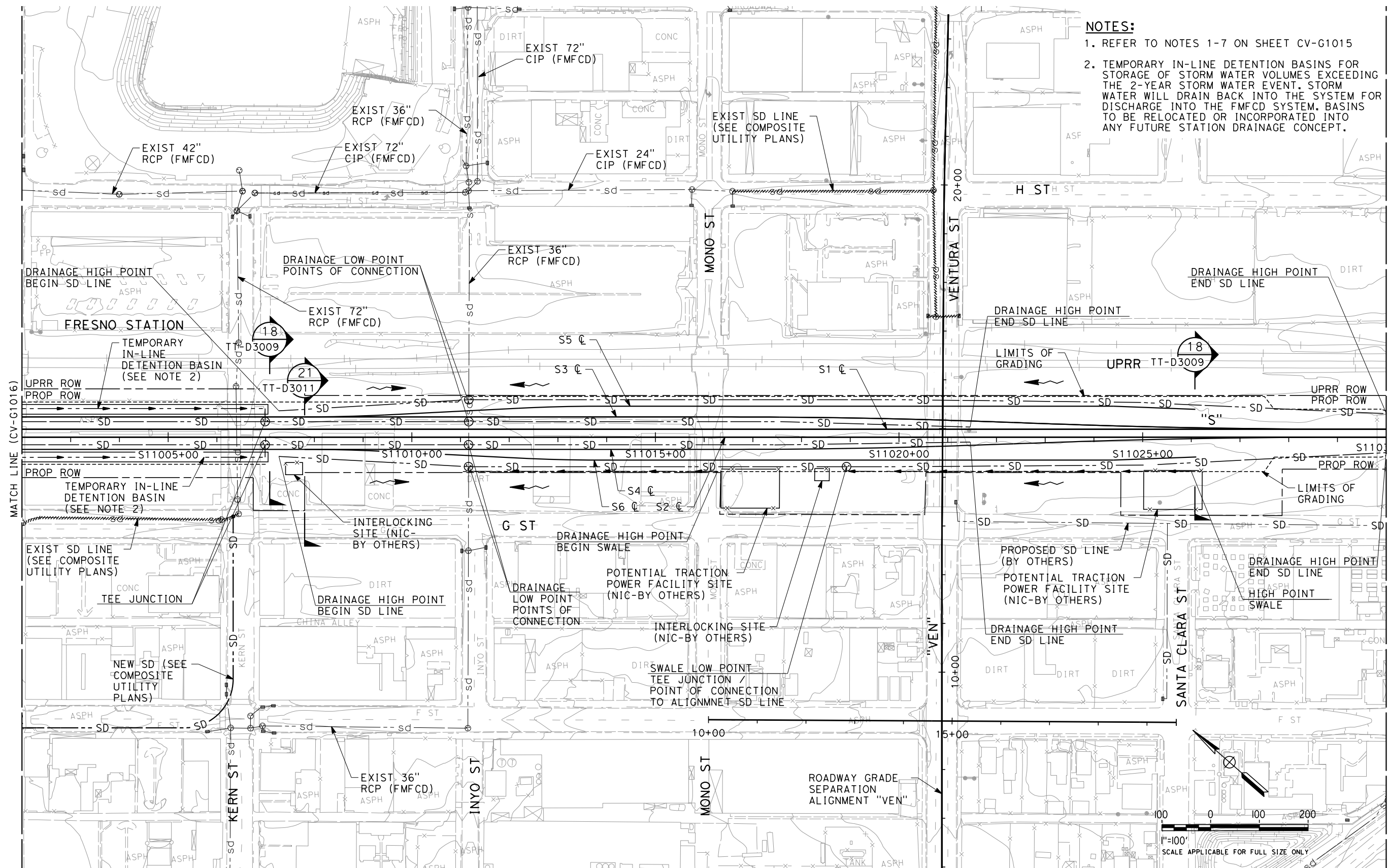
<b>PROPOSED PRELIMINARY DESIGN</b>
<b>NOT FOR CONSTRUCTION</b>



<b>CALIFORNIA HIGH-SPEED TRAIN PROJECT SIERRA SUBDIVISION</b>
PACKAGE 1B UTILITIES
GRADING AND DRAINAGE PLAN
STA. 10974+00 TO STA. 11002+00

CONTRACT NO.
DRAWING NO. CV-G1016
SCALE AS SHOWN
SHEET NO.

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- NOTES:**
1. REFER TO NOTES 1-7 ON SHEET CV-G1015
  2. TEMPORARY IN-LINE DETENTION BASINS FOR STORAGE OF STORM WATER VOLUMES EXCEEDING THE 2-YEAR STORM WATER EVENT. STORM WATER WILL DRAIN BACK INTO THE SYSTEM FOR DISCHARGE INTO THE FMFCD SYSTEM. BASINS TO BE RELOCATED OR INCORPORATED INTO ANY FUTURE STATION DRAINAGE CONCEPT.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. SCHLERETH  
DRAWN BY  
E. SUDHAUSEN  
CHECKED BY  
S. BURGESS  
IN CHARGE  
R. COFFIN  
DATE  
12/08/11

**PROPOSED  
PRELIMINARY  
DESIGN**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
SIERRA SUBDIVISION**  
PACKAGE 1B  
UTILITIES  
GRADING AND DRAINAGE PLAN  
STA. 11002+00 TO STA. 11030+00

CONTRACT NO.
DRAWING NO. CV-G1017
SCALE AS SHOWN
SHEET NO.